The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[*The* MINING JOURNAL *is Registered at the General Post Office as a Newspaper, and for Transmission Abroad.*]

No. 2617.—VOL. LV. LONDON, SATURDAY, OCTOBER 17, 1885. PRICE ..... SIXPENCE. BY POST, £1 4s. PER ANNUM.

MR. JAMES H. CROFTS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER,
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20 Bratsberg, 8s. 6d.
50 Carn Camborne, 3s.
50 Callao Bis, 4s. 9d.
100 Cartago, f. pd., 3s. 6d.
50 Colom. Hyd., 9s. 9d.
20 Cape Copper, £21
50 California, 4s.
25 Colorado, £2 10s.
50 Chontales, 2s. 6d.
15 Copiapo, £2. 12s. 6d.
20 De Beer's, 4¼.
100 Denver, 6d.
100 Devala Moyar, 3s. 9d
20 Devon Con., 30s.
150 Devon Friend, 6d.
15 Dolcoath, £75.
50 Drakewalls, 3s. 3d.
50 East Blue Hills, 20s.
200 Eberhardt, 1s.
20 East Lovell.
50 Ecton.
15 El Callao, £50.
75 Frontino, 13s.
50 Frongoch, 6s. 9d.
50 Goginan, 1s. 3d.
100 Gold Hill, 1s. 6d.
50 Glenrock.
20 Great Holway,
10 Great Laxey, £9 15s.
10 Gunnis. (Clit.), 4s.
75 Hoover Hill, 9s. 6d.
50 Home Mines Trt. 14/
100 Indian Consol., 5s. 6d
100 Javali, 2s.
25 Killifreth, 12s.
25 Kim. North Block.
50 Kohinoor B, 2s.3d.
120 La Plata, 5s. 3d.
30 La Trinidad.
25 Leadhills, £2 5s.
150 Lisbon-Berlyn, 9d.
25 Marke Valley, 3s.
20 Mason-Barry, £7 11 3
50 Montana, £2 10s.
50 Mysore Gold, £2 5s.
100 New Chile, 18s. paid, 7s. 6d.
100 Nacupai, 1s. 3d.
50 New Caradon, 1s.
50 New Emma, 3s. 6d.
10 New Kitty, 16s.
50 Nouveau Monde, 2s 3
40 New W. Caradon, 1s.
100 Nundydroog, 9s. 6d
80 Nine Reefs, 3s.
50 Ooregum, 3s.
50 Organos, 7s. 9d.
50 Orita, 21s. 6d.
100 Oscar, 5s.
75 Oscar Vendors', fully paid, 3s. 3d.
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20 Polberro, £2 1s. 3d.
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25 Panulcillo, 35s.
50 Prince of Wales, 9s 6, call paid.
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10 Rio Tinto, £8 15s.
50 Ruby (New), 5s. 6d.
25 Richmond, £3 7s. 6d.
20 Roman Grav.; £4
20 Schwab's Gully, £3 7 6
150 Shepherd United, 2s 6
100 Spitzkop, 6s. 9d.
20 South Condurrow,
100 South Darren, 8s. 9d.
50 Tacquah, 1s. 9d.
50 Tambracherry, 4s 6d.
30 Tolima A., £3 2s. 6d.
20 ditto B, £2 7s. 6d.
50 Transvaal Gold, 2s
20 Trevaunance, £2 5s.
50 Utd. Mexican, £2 7s 6
20 Van, 28s. 9d.
50 Victoria Gold, 3s.
30 Violeta, 27s.
50 Wassau Gold (offer wanted).
10 West Basset, £2 5s.
5 Wheal Grenville, £13 5s.
10 Wheal Agar, £19
20 Wheal Basset, £6 10s
50 West Caradon, 1s.
20 West Polbreen, 15s.
10 West Kitty.
50 Wheal Coates, 2s.
50 Wheal Crebor, 17s.
10 Wheal Kitty, 12s. 6d.

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50 Carn Camborne, 3s.
60 Callao Bis, 5s.
100 Cartago, f.pd., 3s. 3d.
60 Colom. Hyd., 10s.
5 Cape Copper, £21.
35 California, 2s. 9d.
15 Colorado.
100 Denver, 6d.
100 Devala Moyar, 3s. 3d.
10 Devon Con., £2.
100 Devon Friendship, 6d
2 Dolcoath, £73¼.
50 East Blue Hills, 28s 6
15 Ecton, 25s.
1 El Callao, £51½.
30 Frontino, 12s. 9d.
20 Frongoch, 3s. 9d.
15 Great Holway.
40 Glenrock, 7s. 6d.
5 Great Laxey.
60 Hoover Hill, 7s.
50 Home Mines Trust, 14s. 6d.
50 Indian Consoli., 4s. 3
100 La Plata, 4s. 9d.
10 La Trinidad.
10 Leadhills, £2 3s. 9d.
25 Mason & Barry, £7¼.
10 Montana, £2 6s. 3d.
10 Mysore Gold, £2 7s.
55 New Chile, 7s. 6d.
20 New Emma, 5s.
60 New Lisbon.
200 Nouveau Monde, 2s
50 New W. Caradon, 1s.
50 Nundydroog, 10s.
60 Nine Reefs, 3s.
120 Ooregum, 3s. 3d.
50 Organos, 8s. 9d.
15 Orita, 22s.
30 Oscar,, 5s.
50 Oscar, vendors, 3s.
75 Potosi, 4s. 6d.
30 Prince of Wales, 8s. 3
10 Rio Tinto.
40 Ruby (New).
10 Richmond, £3¼.
5 Roman Gravels, £4.
10 Schwab's Gul., £3 7 6
20 South Darren, 9s.
5 Tolima A.
10 Trevaunance.
10 Uni. Mexican, £2½.
20 Van, £2¾.
80 Victoria Gold, 2s. 6d.
15 Violetta.
5 Wheal Agar, £19.
10 Wheal Basset, £6¾.
5 West Kitty.
10 Wheal Crebor, 15s.

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70 Almada, New, 3s. 6d.
400 Akankoo, 2s. 9d.
10 Balkis, 5d.
40 Bratsberg, 6s. 3d.
60 Cartago, 3s.
100 Californian, 3s. 6d.
80 Callao Bis, 4s. 6d.
45 Carn Camborne, 2s. 6
75 Chile Gold, 7s. 3d.
100 Chontales, 2s.
50 Colombian, 9s. 6d,
25 Colorado, 47s. 6d.
70 Devala, 2s. 9d.
100 Denver, 4d.
3 El Callao, £50.
30 East Blue Hills, 28s.
150 Eberhardt, 9d.
100 Ecton, 23s. 9d.
55 Frontino, 12s.
90 Glenrock, 7s. 3d.
30 Great Laxey, £9½.
60 Home Mines, 13s. 3d.
60 Hoover Hill, 8s. 6d.
100 Ind. Consolidated, 5s.
45 Killifreth, 11s. 6d.
50 Kohinoor B, 2s. 3d.
50 La Plata, 4s. 9d.
30 Leadhills, 43s. 9d.
80 Lisbon-Berlyn, 1s. 9d.
30 La Trinidad, £4.
40 Montana, 46s.
50 Mysore Gold, 46s. 6d.
75 Nouveau Monde, 2s
60 Nundydroog, 9s. 3d.
60 New Emma, 3s. 3d.
80 Orita, 19s. 9d.
45 Organos, 7s. 9d.
35 Oscar Gold, 5s.
40 Panulcillo, 35s.
80 Potosi (New), 5s.
60 Prince Royal, 4s. 9d.
50 Prince of Wales, 7s. 3
30 Richmond, £3 5s.
20 Roman Gravels.
70 Ruby, 6s. 6d.
30 Rio Tinto, £8 13s. 9d.
20 Schwab's Gully, £3 7
70 Shepherds United, 2s.
50 Samuda.
60 Spitzkop, 7s. 3d.
2 Tolima, A. £2 19s.
30 Trevaunance, 45s.
100 Tambracherry, 4s. 6d.
25 United Mexican, 46s 6
40 Violeta, 23s. 9d.
40 Van, 28s.
50 Victoria Gold, 2s. 3d.
30 West Godolphin, 23s 6
30 West Kitty, £3 3s. 6d
60 W. Metal & Flow, 15s 6

The following SHARES WANTED for CASH:—

70 Cathedras.
100 Colombian.
100 Frontino.
75 Montana.
60 Mysore
50 Nundydroog.

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SELLERS and BUYERS should send FIRM ORDERS at once.
CLOSING PRICES, FRIDAY, 16TH OCTOBER, 4 P.M.

	Buyers.	Sellers.		Buyers.	Sellers.
Almada	£ 0 2 6	£ 0 3 6	Montana	£ 2 3 9	£ 2 6 3
Bratsberg	0 6 0	0 8 0	Nundydroog	0 9 0	0 10 6
Balkis	0 0 0	0 0 0	Nouveau Monde	0 1 6	0 2 0
Callao Bis	0 4 0	0 5 0	New Potosi	0 3 6	0 4 6
California	0 2 0	0 3 0	New Chile	0 6 6	0 7 6
Colombian	0 9 0	0 10 3	Oscar, vendors	0 2 6	0 3 6
Colorado	2 7 6	2 12 6	Oscar, fully paid	0 4 0	0 5 0
Cartago, f. p.	0 2 6	0 3 6	Orita	0 17 6	1 1 3
Devon Consols	1 15 0	2 0 0	Organos	0 7 0	0 8 6
East Blue Hills	1 6 3	1 8 9	Ooregum	0 2 6	0 3 6
Frontino	0 11 3	0 13 9	Prince of Wales	0 7 0	0 8 6
Glenrock	0 6 6	0 7 6	Prince Royal	0 4 0	0 5 3
Home M. Trust	0 13 0	0 15 0	Ruby	0 5 6	0 6 6
Hoover Hill	0 8 0	0 9 0	Shepherds Uni.	0 2 0	0 3 0
Indian Consoli.	0 3 9	0 4 6	Schwab's Gully	3 2 6	3 7 6
Killifreth	0 10 0	0 12 0	Utd. Mexican	2 0 0	2 5 0
Lisbon Berlyn	0 0 0	0 0 0	Van	1 5 0	1 7 6
La Trinidad	3 10 0	3 15 0	West Kitty	8 0 0	8 5 0
Leadhills	2 0 0	2 5 0	Wheal Crebor	0 13 9	0 16 3
La Plata	0 4 0	0 5 0	Wheal Metal	0 12 6	0 15 0
Mysore	2 2 6	2 7 6			

INVESTORS should send for BEAZLEY and CO.'S LIST of CLOSEST PRICES, published every Wednesday, which will be forwarded on receipt of STAMPED DIRECTED ENVELOPE.

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Shares supplied for FORWARD DELIVERY on BEST POSSIBLE TERMS.
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75 Akankoo, 4s. 6d.
100 Bratsberg, 7s. 6d.
250 Balkis.
40 Colorado, £2½.
150 Cartago, 3s. 9d.
100 California, 3s. 6d.
120 Callao Bis, 4s. 9d.
100 Colombian, 10s.
5 Cape Copper, £21¼.
30 Copiapo, £2 12s. 6d.
200 Chontales, 3s.
150 Denver, 6d.
250 Devon Friendship, 1s.
15 Devon Con., £2 2s. 6d
3 Dolcoath.
50 East Blue Hills, 30s. 6
100 Eberhardt, 9d.
70 Frontino, 13s.
200 Glenrock.
30 Great Holway.
100 Indian Cons., 5s. 6d.
25 Killifreth.
150 Kohinoor B, 3s.
20 Leadhills.
50 La Plata, 5s.
60 Montana, £2 8s.
15 Mason & Barry.
50 Mysore, £2 5s.
100 New Lisbon-Berlyn, 1s. 9d.
500 Nacupai.
150 Nouveau Monde, 2s. 3
100 New Hoover Hill, 8s 9
150 New Emma, 5s. 3d.
100 New Potosi, 5s. 3d.
150 New Chile, 7s. 3d.
250 Oscar Gold.
50 Ooregum, 3s. 9s.
75 Organos, 8s. 6d.
25 Orita, 21s. 6d.
30 Panulcillo, £2.
100 Prince of Wales.
40 Richmond, £3¼.
25 Roman Gravels,
10 Rio Tinto, £8¾.
50 South Caradon, 6s.
15 South Condurrow.
25 Trevaunance, 48s. 9d.
30 United Mexican.
50 Van, 30s.
5 Wheal Agar.
10 Wh. Grenville, £13¼.
50 Wheal Crebor, 17s. 6d
75 W. Godolphin, 22s. 6d
10 West Kitty.
100 West Polbreen.

Where prices ARE NOT INSERTED offers may be made.
WHEAL GRENVILLE and WEST GODOLPHIN shares recommended.

Mr. BUMPUS devotes SPECIAL ATTENTION to LEGITIMATE MINES, and is in a position to afford reliable information and advice to intending investors, and others in the selection of Shares either for INVESTMENT or SPECULATION. Correspondence invited.
ESTABLISHED 1867.

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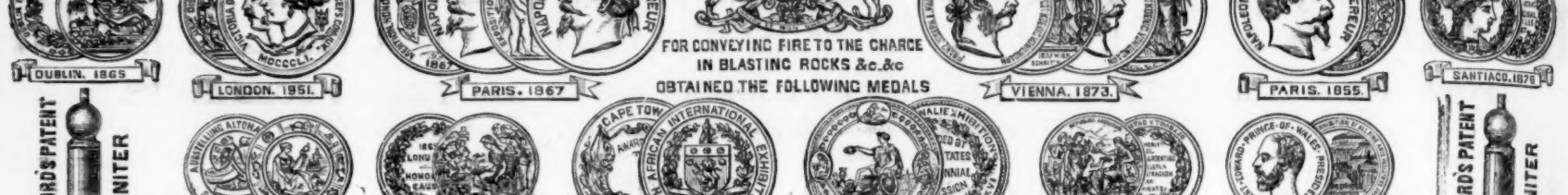


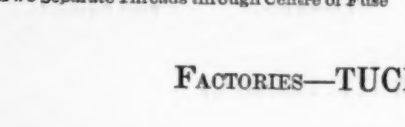
FOR SIMULTANEOUS BLASTING.

SILVER MEDAL OF THE MINING INSTITUTE OF CORNWALL, TRURO, 1880, for an Improved Method of Simultaneous Blasting.

FOR SIMULTANEOUS BLASTING.

Note the TRADE MARK:

REGISTERED TRADE MARK



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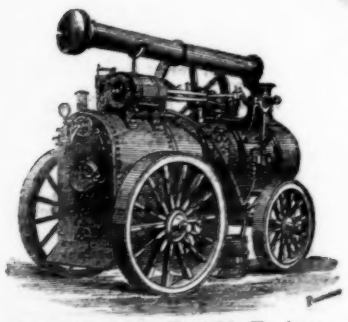
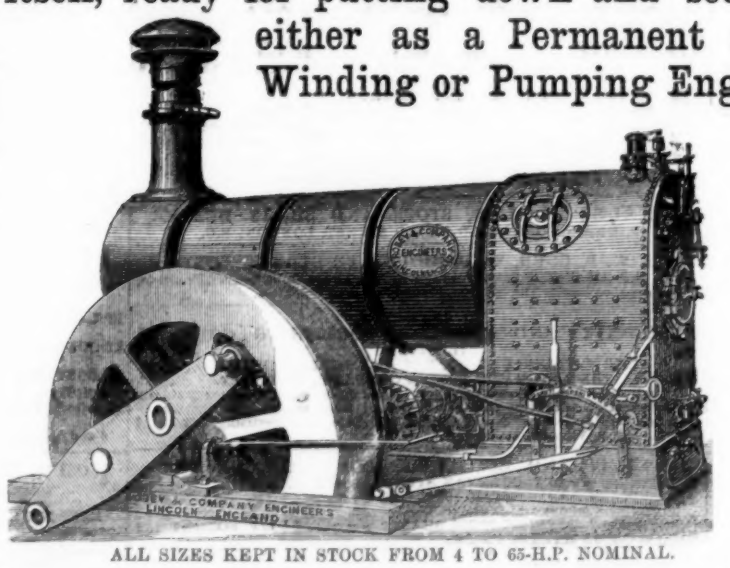
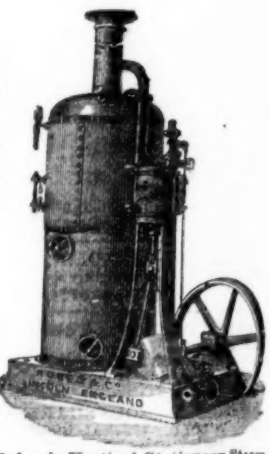


Robey's Superior Portable Engines, 2½ to 50-h.p.

The PATENT "ROBEY" MINING ENGINE is complete in itself, ready for putting down and setting to work, either as a Permanent or Temporary Winding or Pumping Engine.



ALL SIZES KEPT IN STOCK FROM 4 TO 65-H.P. NOMINAL.



Robey's Vertical Stationary Steam Engine, 1½ to 16-h.p.

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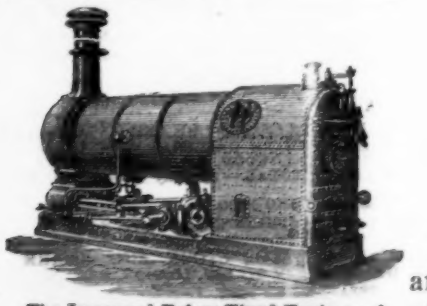

The Improved Robey Fixed Engine and Locomotive Boiler Combined. 4 to 65-h.p., and Compound Robey Semi-fixed Engine.

Please note this is the Original "ROBEY" Engine as designed and manufactured by Messrs. ROBEY and Co., of Lincoln. All others are mere attempts at imitation.

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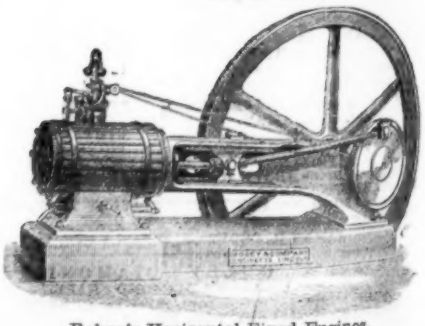

Robey's Horizontal Fixed Engines, 4 to 60-h.p.

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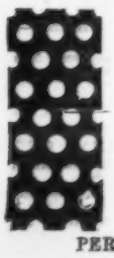

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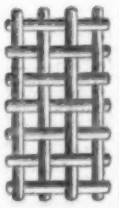

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Patent Steel Trucks, Points and Crossings,

PORTABLE RAILWAY, STEEL BUCKETS, &C., &C. GILDERSOME FOUNDRY, NEAR LEEDS.

Patented in Europe, America, Australia, India, and British South Africa, 1875, 1877, 1878, 1881, and 1883.

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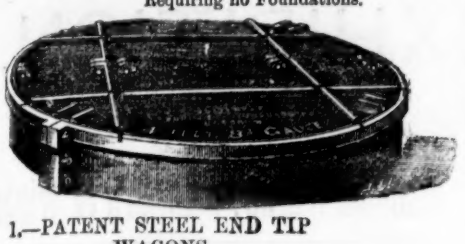
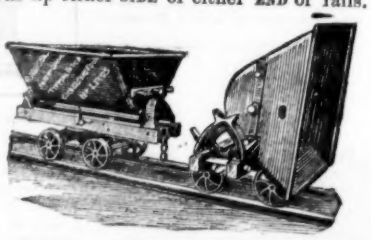
17.—SELF-CONTAINED TURNTABLE,
Requiring no Foundations.



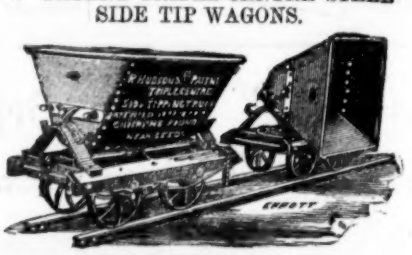
1.—PATENT STEEL END TIP WAGONS.

2. PATENT UNIVERSAL TRIPLE-CENTRE STEEL TIPPING TRUCK,
Will tip either SIDE or either END of rails.



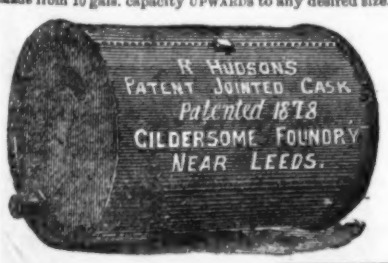
ONE MAN CAN EASILY tip ANY WEIGHT in these wagons.

3.—PATENT TRIPLE-CENTRE STEEL SIDE TIP WAGONS.

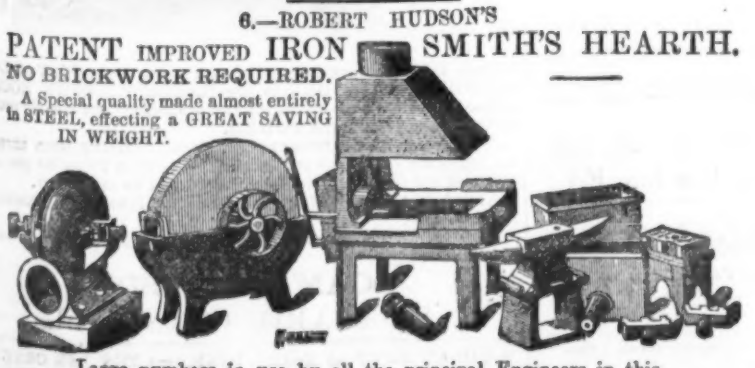


4. -PATENT STEEL PLATFORM OR SUGAR CANE WAGON.

5.—PATENT STEEL CASK.
As supplied to H.M. War Office for the late war in Egypt).
DOUBLE the STRENGTH of ordinary Casks without any INCREASE in weight.
(Made from 10 gals. capacity UPWARDS to any desired size.)

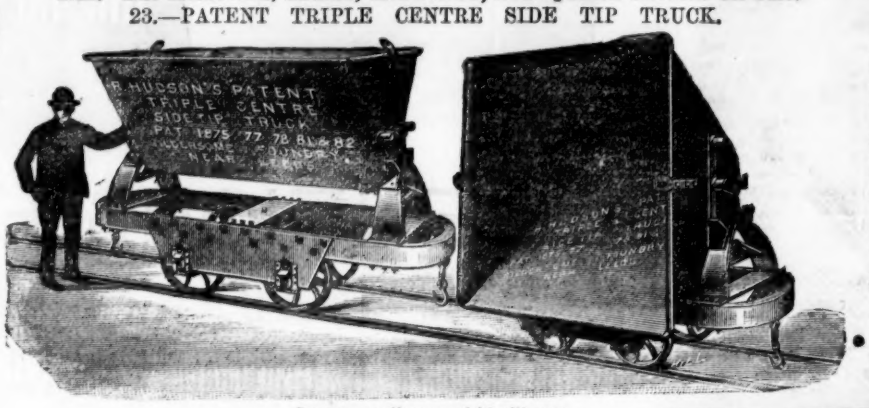


6.—ROBERT HUDSON'S
PATENT IMPROVED IRON SMITH'S HEARTH.
NO BRICKWORK REQUIRED.
A Special quality made almost entirely in STEEL, effecting a GREAT SAVING IN WEIGHT.



Large numbers in use by all the principal Engineers in this country and abroad.

23.—PATENT TRIPLE CENTRE SIDE TIP TRUCK.

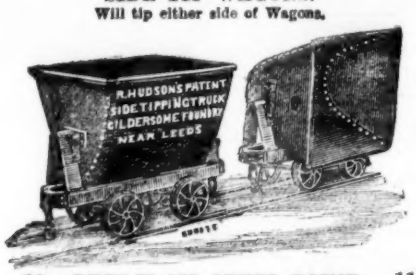


One man can tip any weight with ease.

Upwards of 25,000 of these Trucks and Wagons have been supplied to the South African Diamond Mines; American, Spanish, Indian, and Welsh Gold, Silver, Copper, and Lead Mines; Indian and Brazilian Railways, and to Railway Contractors, Chemical Works, Brick Works, and Coal and Mineral Shippers, &c., &c., and can be made to lift off the underwork, to let down into the hold of a vessel, and easily replaced. They are also largely used in the Coal and other Mines in this country, and are the LIGHTEST, STRONGEST, and most CAPACIOUS made, infinitely stronger and lighter than wooden ones, and are all fitted with R. H.'s Patent "Rim" round top of wagons, requiring no rivets, and giving immense strength and rigidity. End and body plates are also joined on R. H.'s patent method, dispensing with angle-irons or corner plates.

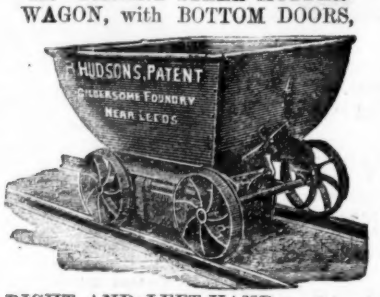
7.—PATENT STEEL MINING WAGONS.

8.—PATENT DOUBLE-CENTRE STEEL SIDE TIP WAGONS.
Will tip either side of Wagons.



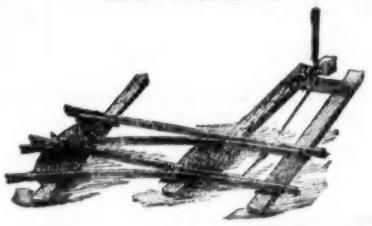
9.—HOPPER WAGON.

12.—PATENT STEEL HOPPER WAGON, with BOTTOM DOORS,

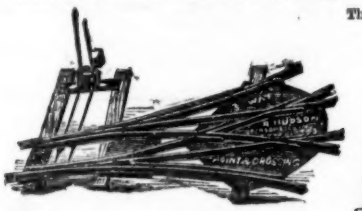


13.—PATENT STEEL HOPPER WAGON.

10.—LEFT-HAND STEEL POINT AND CROSSING.



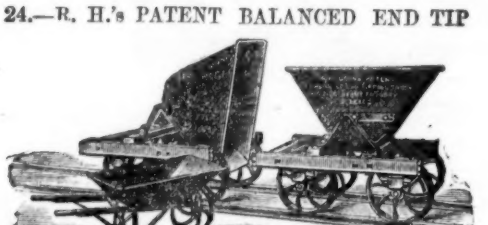
11.— RIGHT AND LEFT-HAND STEEL POINT AND CROSSING.



14.—SELF-RIGHTING STEEL TIP BUCKET.
The "Catch" can also be made self-acting if desired.

15.—R. HUDSON'S Patent Steel Cage and "Fallers," &c., complete.

24.—R. H.'s PATENT BALANCED END TIP



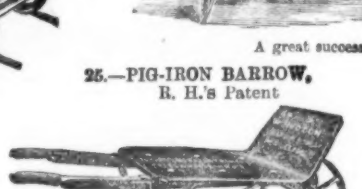
18.—"AERIAL" STEEL WINDING TUB.

Largely employed in the South African Diamond Fields.

16.—PATENT STEEL WHEELBARROWS.
Made to any Size.
Lightest and Strongest in the Market.

A great success.

25.—PIG-IRON BARROW,
R. H.'s Patent



No. 22.

19.—PATENT STEEL CHARGING BARROW.
Double the strength and lighter than ordinary Barrows.

No. 21

ALL KINDS OF BOLTS, NUTS, AND RIVETS MADE TO ORDER ON THE PREMISES.

This Drill may be seen at work any hour from 10 A.M. to 6 P.M. at the International Inventions Exhibition, Stand No. 194, North Court, South Galleries.

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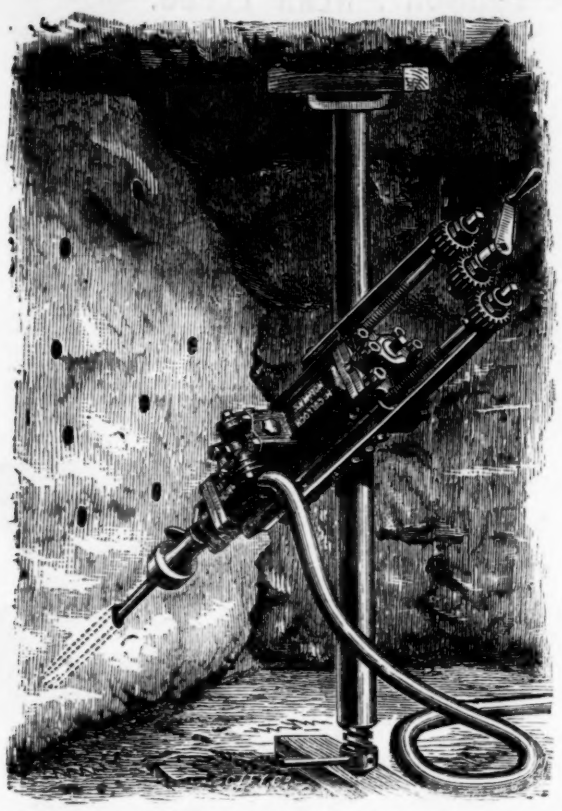

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The "CORNISH" ROCK DRILL and "CORNISH" COMPRESSOR

Are now largely in use, and in every case are giving entire satisfaction.

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First Silver Medal awarded at Boring Competition, East Pool Mine, Sept. 1883.

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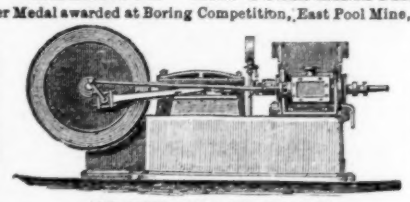

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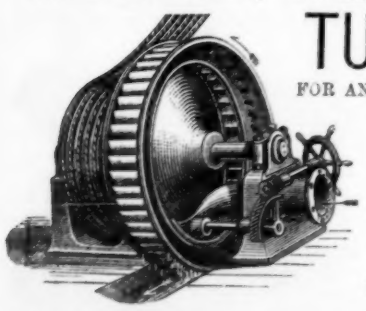

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Special Turbines for ELECTRIC LIGHTING AND MINING.

Fans, Mine Ventilators, Centrifugal Pumps.

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Prices, &c. on Application.

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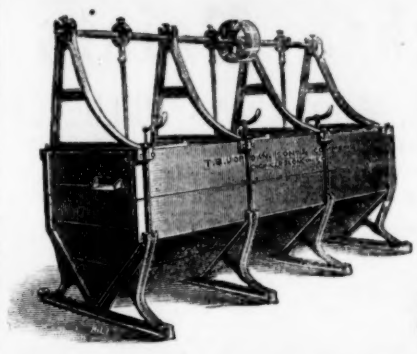

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Mining Pumps

FOR EVERY PURPOSE, MANUFACTURED BY

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Vertical Bucket and Plunger or Double Plunger Sinking Pumps. The latter specially suitable for gritty water.

EXTRACT FROM PRICE LISTS—

Deane Double Plunger Sinking Pump ..... To throw 4,500 gallons per hour 150 feet high with 55 lbs. steam... £ 95
ditto 10,000 gallons " " " ... 150

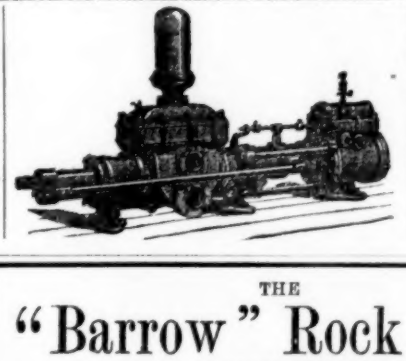
PULSOMETERS—No.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Gallons per hour approx.	600	2000	3800	5000	9000	13,000	17,000	26,000	36,000	52,000	65,000
PRICE	£10	17	26	30	45	55	70	100	120	150	200

Foot Valves or Back Pressure Valves, extra. On 30 feet total lift the quantities thrown by Pulsometers will be reduced by about one-third. All the above kept in stock, as well as a large assortment of Deane Horizontal Piston Pumps, Boilers, Pipes, Steam Hose, &c.

The Illustration on the right represents a Horizontal Plunger Pump for gritty water. The piston stops and starts slowly at the end of each stroke, so that the valves may HAVE TIME TO SEAT QUIETLY, AND CAUSE NO SHOCK OR JAR.

Great Simplicity of Mechanism.

Entire Certainty of Action.



The Pulsometer as suspended on a chain for sinking purposes where the lift is not over about 80 feet total. No staging or fixing of any sort is required. The pump will pass grit and sand freely.

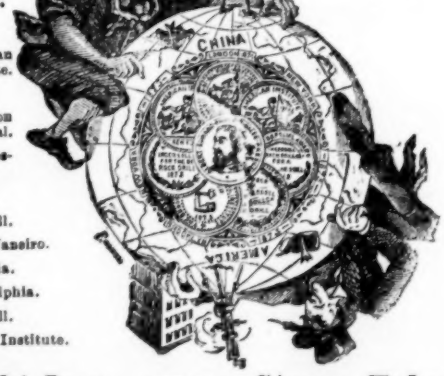
PATENT

"INGERSOLL ROCK DRILL."

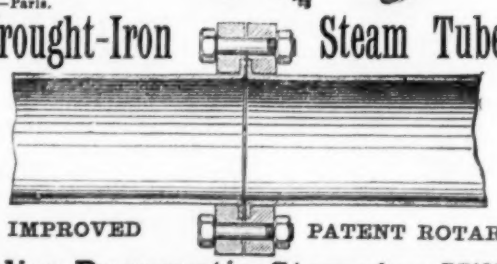
MEDAL AND HIGHEST AWARDS.

1872—American Institute.
1873—Ditto.
1874 — London International.
1875—Manchester.
1875—Leeds.
1875—Cornwall.
1875—Rio de Janeiro.
1876—Australia.
1876—Philadelphia.
1877—Cornwall.
1877—Mining Institute.
1878—Paris.

We claim 40 per cent. greater effective drilling power.



Wrought-Iron Steam Tubes.



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TUBES FOR BOILERS, PERKINS'S, and other HOT-WATER SYSTEMS.

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THE

"Barrow" Rock Drill

COMPANY.

HOSKING AND BLACKWELL'S PATENT.

SUPPLY their CELEBRATED ROCK DRILLS, AIR COMPRESSORS, &c., and all NECESSARY APPLIANCES for working the said Drills.

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SALE BY PUBLIC AUCTION OF THE MINING AND LANDED PROPERTY, &c. OF THE "CALLER-STOLLEN-GEWERKSCHAFT," IN RHENISH PRUSSIA.

BY decision of the meeting of the Shareholders, the undersigned MR. GRAFFWEG, Royal Notary, will SELL BY PUBLIC AUCTION, on WEDNESDAY, the 28th October, 1885, at 3·30 P.M., at his offices, No. 13, Steinfeldergasse, Cologne, without reserve, the MINING CONCERN of the above-named company, consisting of a MINING CONCESSION of lead, copper, and iron, measuring 2,959,287 7M., situate near Call, on the Call-Trier Railway; also Landed Property of 55HA. 52A. 79M., comprising superior dwelling-house at Call, two officials dwelling-houses on the works, machinery, plant, and warehouses, comprising one 24-horse power winding engine, one 24-horse power water engine, one 26-horse power dressing machine, two Bouilleur boilers, each of 25-horse power, one Field's boiler of 40-horse power, rails above and underground of about 2000 metres in length, dressing with drums, set, and round buddle, &c. The mine was until about two months ago in full working order, and produced sulphuret of lead and white lead ore, containing an average of 61 per cent. lead, and 14·18 gr. silver in 100 kg. ore.

The conditions of the sale, documents, as well as a description of the mine, may be seen at the office of the undersigned Notary; also at the Mining Manager, Mr. GERLACH, at Call, the latter of whom would send the description and full particulars on application.

Cologne, September, 1885. (Signed) THE ROYAL NOTARY: GRAFFWEG.

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GEOLOGICAL MAP OF CORNWALL

By BRENTON SYMONS, C.E., F.C.S.

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MINING JOURNAL Office, 26, Fleet-street, E.C.

Original Correspondence.

AUSTRALIAN MINERAL EXHIBITS AT THE COLONIAL AND INDIAN EXHIBITION, LONDON, 1886.

SIR,—I was pleased to notice in last week's issue, by the letter of Mr. James Thomson, secretary, Royal Commission for Victoria, that the Commissioners for that colony intend making a comprehensive display of mineral exhibits, and that several of the leading gold mining companies will be sending some magnificent specimens of gold-bearing quartz, with models of all kinds of machinery used in their mines both for underground and surface operations. Mr. Thomson says that I may rest satisfied that the gold mining industry will be creditably represented, and further that the great bulk of the exhibits will be presented to the Colonial Museum at the close of the Exhibition. Having taken a more prominent interest, and devoted more attention probably than most Victorians, to the development of its auriferous resources, I may be excused in saying that I especially desire to see the Victorian and other Australian gold fields more than creditably represented. What may be deemed a creditable representation of the mining industry by many may not probably come up to my expectation of what I know, from personal experience, are the real merits of the gold mining industry and the resources of Australia, and as to how attention can be best drawn to the importance of its further development, and the value of an increased supply of gold.

As I stated in my letter to you, June 27th, to which your correspondent refers that although specimens of gold-bearing quartz or models of nuggets of gold, and pyramids to show the bulk quantity obtained in any colony, may be interesting to a few as something to look at, it does not convey an impression of a lasting nature to the general observing public, as to the real value of our mineral resources in the colonies and the great importance of the gold mining industry as a means of creating new wealth, and the extension and development of trade, commerce, and industries in Great Britain. What the British public will be most interested in seeing will be the actual *modus operandi* by which gold is obtained from the matrix, and this can only be done by carrying out the proposal for the forthcoming Exhibition as I have suggested, and as I was the first to suggest in Melbourne for the Paris Exhibition in 1878. I see by the *Argus* that at a meeting of the Victorian Commissioners that the subject was mooted by Mr. Blyth, and the secretary reported that Mr. Woods, M.L.A., who had made enquiries about the matter told him that the idea could not be carried out. The quartz for crushing could not be obtained unless it was taken home, and considering the position of the Exhibition it was doubtful whether the English Commission would accept so noisy an exhibit. The disposal of sludge was another difficulty, and outside this it was stated that the manufacturers in Victoria objected to sending home batteries when they were aware that English manufacturers were anxious to secure designs for their own purposes. I must express my surprise at such frivolous objections having been raised by Mr. Woods. If he is afraid of English manufacturers getting a wrinkle from Victoria, then why send anything at all? For my part I have no such scruples, and as it has been my lot to see and be interested in many exhibitions since 1851, I may be allowed to have some little experience in these matters. When I proposed a similar but smaller exhibition for the Paris Exhibition in 1878, I found no difficulty in getting the offers of machinery from manufacturers, nor quartz from gold mining companies; and I am satisfied if this matter is properly entertained by the Victorian Commissioners that I should experience no difficulty in obtaining the machinery and quartz on the terms I wanted. What is wanted to make this a success is unity of purpose, and no jealousy or wet blanketing. The Victorian and other colonial Commissioners may rest assured that I do not propose an undertaking that is impracticable, and I have already paved the way for making this a success. The exhibit of a quartz crushing battery in active operation could not be allowed in any of the ordinary courts, nor is it necessary it should be. My proposal is that it should be a special exhibit in an outside space, and that it should be representative of all our gold-producing colonies, or at least those co-operating in carrying it out. For that purpose I waited on Sir Phillip Cunliffe Owen, who approved of my proposal, and said if I could get a joint representation made by the colonies to him that he would lay the matter before H.R.H. the Prince of Wales, and advise him to sanction the exhibit, and to grant the necessary space. Thereupon I placed myself in communication with each of the Agents-General for the Australian colonies, New Zealand, and the High Commissioner of Canada, from each of whom I have received replies of an encouraging nature. Mr. R. Murray Smith, C.M.G., Agent-General for Victoria, is giving the matter his attention, and arranging for an interview with his colleagues on the question, when I trust the matter will be fully ventilated and arranged for at this side.

From what I know and remember of the enterprising spirit of the Victorian manufacturers of mining machinery the only difficulty I foresee would be in deciding which of the makers of quartz crushing batteries should have the honour and privilege of making the machinery that would have more attention, given to it than has ever been paid to any other exhibit in the world. Something near 4,000,000 of visitors will have attended the present Exhibition before closing, and at the next one I estimate not less than 5,000,000 of people will attend it, out of which I am confident that four-fifths will visit and feel an interest in the Australian gold crushing machinery, and to see the process of amalgamating, cleaning, and retorting of the gold. There is, of course no necessity of sending boilers from Australia, as the steam power would be supplied, nor probably the engines, but what I am desirous of seeing is, that the Victoria manufacturers should have the opportunity of showing their ability of making first-class machinery and appliances for quartz crushing, &c., and a number of the leading mines of the colonies should send about 10 tons each of good average quality quartz; that each company should have a day's crushing at the battery, and an appointed time for cleaning up, which would be a special feature of attraction to large numbers, and for which provision will have to be made for their accommodation during the process. As each company's stone was being crushed, printed circulars relative to the mine could, of course, be given out to the tens of thousands of visitors daily, and during the cleaning up process, while the battery was silent the voice of some competent person might be utilised to give a general description of the operations as they proceed. A good sized amphitheatre would have to be constructed to hold a section of the numbers who would desire to see the process and hear the lectures to be given daily on the gold mining resources of Australia, New Zealand, and Canada. By this arrangement there need be no feeling of jealousy exhibited to thwart the harmony of the proceedings, which, if carried out as I suggest, and as I feel confident can be arranged for if there is a unity of purpose, it will be the most interesting exhibit ever seen in London. I trust the Australian, New Zealand, and Canadian papers will notice this. THOMAS CORNISH, Mining Engineer.

THE MINE MANAGER OF THE FUTURE.

SIR,—I have no doubt that many mine managers like myself have read with considerable interest and some surprise the account given in the *Mining Journal* of the 19th ult., of the prosecution of the Snaefell Mining Company and the owner of a neighbouring mine, on the ground of there being an excess of carbonic acid gas, and a deficiency of oxygen gas in the working parts of the mines as determined by scientific tests. No reasonable man, I imagine, would object to Her Majesty's Inspectors of Mines insisting on proper and adequate means being provided to supply the miners with good air at those points where without artificial means it would be bad and prejudicial to health; but it will be a surprise to many to find that the mine manager of the future must needs add to his other qualifications the ability to make a quantitative analysis of the air we breathe. In our early days it was considered a reliable and sufficient test of whether the air in the mine was fit to breathe that a candle burnt brightly in it.

It seems now that this simple test is no longer to be relied upon, that it is not sufficient that our candles give a clear and steady light in the end of the level and at the top of the rise, that the men suffer no inconvenience from breathing the air at these working points, and are not conscious of an excess of the asphyxiating carbonic acid, or a deficiency of the vital oxygen. We need now take underground with us, in addition to dial, or pocket compass, clinometer, measuring tape, &c., some chemical apparatus to determine on the spot quantitatively two of the constitutents of the air, or to bottle some portions of air for careful analysis at surface. I have grave doubts whether the average mine manager feels himself competent to undertake the task. Moreover, it is to be feared that, notwithstanding science classes and cheap scientific books, there are still a goodly few of our class who have not yet mastered the exact composition of atmospheric air, and who would be puzzled to state the formula of carbonic acid gas, or the properties of oxygen gas, and even those of us who have, as we think, a fair knowledge of chemistry, and are able to appreciate Her Majesty's Inspectors' scientific treatment of the important subject of ventilation, would be bound, in the majority of cases, honestly to confess that with all our practical knowledge we must when it comes to the point draw the line at the quantitative analysis of air. O ENGENHEIRO DAS MINAS.

Portugal, October 8.

THE BETTWS-Y-COED LEAD MINES.

SIR,—To the west of the group of mines described in my letter of last week, just above the famous Swallow Falls, and on the side of the turnpike road, tourists and visitors frequently linger a few minutes to examine a door with the words "Glyn Lead Mine" thereon (the chief entrance to the workings), and thousands of people, both in the United Kingdom and out of it, could doubtless show specimens of lead ore taken from here; but few, very few, are acquainted with the merits of the property, notwithstanding it has had a brilliant former history, and more than one past generation have found the mine remunerative in close proximity to the fern roots, and for a very considerable length on the course of the lodes, but nowhere have operations been carried to a greater depth than 12 to 15 fms. from surface. In the shallow levels the chief lodes (which run from north east to south-west) have been entirely taken away, and in the deepest level (referred to as opening from the turnpike road) the lode is continuously productive for upwards of 75 fms., varying in yield where any ground is left from 25 cwts. to 50 cwts. of lead to the fathom, with a leader of ore in the present forebreast worth 30 cwts. per fathom in a beautiful matrix of congenial clay-slate and carbonate of lime, and with a known richer course of ore going down a few fathoms in advance. On another part of the property, what is locally known as the Trench lode, bearing in a north and south direction, has been opened on to a considerable distance by open excavation. Tradition says it was very rich for lead ores, and the very small amount of debris left, together with the large quantity of lead therein, would certainly appear to bear out the assertion, and at the junction of those powerful and productive lodes it is only reasonable to anticipate a rich mine. The sett is about 120 acres in extent, and has a constant and sufficient stream of water for all purposes, supplied by a large natural lake at the head of the property, with a sufficient fall therefrom (about 400 ft.), to admit of the convenient erection of turbines, overshot wheels, &c., at the most suitable points, but as the best part of the mine should be looked for near the great intersections in the lower ground, the quantity of backs from adit levels will be small, and a shaft should be sunk near the junction, which at a depth of 20 fms. would probably open ore ground enough on the half-dozen known lodes to give reserves to the end of the lease.

The late lessee, and a private circle of friends, intended working it in this way, and arrangements had been entered into for the transfer to a private company at a large figure, but he was called to another sphere before completing it. Then followed the late great depression in the lead trade, and the mine stands on the hands of the trustees. I have recently had applications from old miners, who offer to work the ores at their own cost and pay a royalty of 1*l.* per ton, and when we consider the present market price of lead, and the fact that they would have to win and make it marketable much in the same primitive style that their great grandfathers did, it speaks well for the mine. But there are difficulties in the way of this course, and the trustees do not care to remove them, except it were to sell out and realise, and consequently the miners who could earn a fair living at home, and at the same time develope the wealth-producing industries of their own district, must turn their eyes toward a Manchester canal or some other public work to save themselves from the workhouse. It was in times of depression something like the present—about 50 years since—and when the price of lead was quite as low as now, that several of the richest lead mines of the Principality were courageously developed, and how nobly they have since repaid their owners has become a matter of history, and we may rely upon it that history will repeat itself if we will but put forth the same pluck and energy as our forefathers, and at the same time take the advantage of modern improvements, and of the slow but certain upward tendency of the markets to put our mines in order to make returns. CHARLES KNEEBONE.

Bettws-y-Coed, October 14.

MINING ADVENTURES IN BRITISH COLUMBIA.

SIR,—Now that the Canadian Pacific Railway is so near completion we shall be within a few days of the unexplored and vast mineral regions of the Rocky and Cascade Mountain ranges in our own Canadian territory. In addition to the placer mining, now and again stimulated by fresh discoveries, some of the hands recently engaged on the railway are turning their attention to the development of the mineral lodes already discovered, and it is at present impossible to tell to what extent this industry may grow. Of one thing we may be certain, that the splendid fields now placed within easy reach will not remain unoccupied by American capitalists, so soon as their value has been more fully realised and proved, situated as they are so near to the great mineral state of California, unless we seize the opportunities of occupation now inviting us.

Captain Carroll, on behalf of a number of American capitalists interested in prospecting for minerals on the Queen Charlotte Islands and the north of Vancouver's Island, has been visiting proprietors who have been quietly at work for over 12 months. As the result of his visit, says the Victoria *Times* of September 11, he speaks of the mineral richness of the districts in the most glowing terms, and predicts that in a few short years the world will be astonished at the now latent wealth of that section. It is expected that a large amount of American capital will be shortly invested in developing the mineral resources there found. Captain Sturt, C.E., of Nanaimo, has been inspecting a lode of quartz containing silver and gold discovered by Major Downie 25 years ago. The ledge is situated at the head of Kitinat inlet, 30 miles south of the Skeena, and to the east of the coast range; the exposed portion, some 400 ft. in extent, averages 5 ft. in width, its walls being composed of slate and porphyry. An assay made some years ago gave $29 in silver and $8 in gold to the ton. Captain Sturt brought with him about a quarter of a ton of quartz to forward to San Francisco for a milling assay, taken indiscriminately from the surface of the ledge. Major Downie, who accompanied the captain to Kitinat, is now engaged in looking up other ledges in that vicinity. It is the intention of the company to run a tunnel on the ledge for the purpose of further testing it. Should it prove a success, as there is very strong probability that it will, other valuable ledges will be discovered in the vicinity, as it is unquestionably a section of country very rich in minerals.

Mr. William Teague, who has resided in the province for several years, has already written in your columns of the promising field for the employment of British capital which British Columbia presents. He has engaged the services of Messrs. Rublin, Hooper, Williams, and Shears, experienced miners from his native county in the old country, to open up the mineral lode he is interested in, the Queen Gold and Silver Mine, Yale; and according to the latest detailed information which I have received, "the cutting of the plat (or chamber) in the tunnel, preparatory to sinking a shaft, is completed, and opened out on a course of lode 5 ft., where the lode is found to be fully the width of drift, 6 ft. wide or more, with no hanging-wall yet in view. The lode is opening out with splendid indications, carrying quartz of a most favourable character, with ribbons of rich argentiferous ores, blende, friable quartz, with a beautiful flookan, and heavily charged throughout with iron pyrites. The lode now discovered is only about 8 ft. from surface, with a strike of about 30 per cent." What is wanted is capital to test the mineral lodes of the province much more thoroughly than hitherto attempted; and if we are slow to embrace the opportunities now presenting we shall, without doubt, see our American cousins seizing their opportunity as they have done in Eastern Canada. I was much interested, when recently in Victoria, in inspecting the specimens of mineral treasure, already discovered, in view at the Mechanics' Institute in that city; and now that the highway to the district is well-nigh completed, and the vast territory brought within some 20 days of our shores, we may surely hope that the hitherto crippled efforts of local enterprise may be cherished and aided by British capital, and that well-merited success may crown the efforts of both alike.

JOHN WARD, M.D.

Driffold, Sutton Coldfield, Birmingham, October 9.

ROYALTY RENTS.

Sir,—As the question of excessive acreage and tonnage rents for minerals is now being brought prominently before the public, it is desirable that a matter of, if possible, greater importance to the mining community, both capital and labour, should also have attention—the question of overpaid minimum or dead rents. It often happens that, owing to a dislocation of the strata, deterioration, or thinning of minerals, and bad trade, the lessee pays the lessor hundreds or thousands a year more than the value of the minerals he has been able to work. This goes on year by year until the end of the lease, when the minerals revert to the lessor, and the lessee has lost all interest in the property. In some leases the power to take credit for overpaid rents ceases in as little as three years, so that the lessee, even through no fault of his own, may have to pay for the same minerals twice over in four years—when he could not work the minerals, and had to pay for same in his minimum rent, and when he worked the minerals four years afterwards, and had to pay for them again. It is easy to imagine what effect this has upon both capital and labour. Many collieries at the present time are being worked at a heavy loss, and often to the ruin of the lessee, whose capital is crippled, and he can neither work his colliery to the best advantage, nor start new undertakings, the only party who is benefited being the lessor.

I am acquainted with a number of cases as proof of the above. One colliery in the Midland Counties at present standing, the lessees of which are now paying a large yearly minimum rent in preference to working the coal, which is practically unworkable; and of another case, of very recent date, where a noble Lord insisted upon being paid for many acres of coal twice over within a very few years. In many cases if the lessors took the trouble to investigate the cases themselves they would see the hardship in insisting upon "their pound of flesh;" but it often happens that the matter is left in the hands of agents, who screw all they can out of the lessees, and should the matter be referred to the lessor the facts are explained by the interested agent. What is wanted to give relief to all concerned in the mining community is as follows:—

1.—A reduction in the acreage or tonnage rent when the minerals are of less value then when leased, owing to faults and thinning or deterioration in quality.

2.—Adjustment of minimum or dead rents when, owing to circumstances over which the lessee has no control, he is unable to work up to the amount of the same.

3.—A reasonable length of time to be allowed the lessee after the expiration of his lease to work up the minerals he has previously paid for, or a fair allowance to be made by the lessor.

This would give great relief to the mining interest, bringing in much capital and labour, and only affect unscrupulous lessors.

October 9. A Colliery Proprietor.

ROYALTIES.

Sir,—Your recent article upon Mineral Royalties opened a wide and important field of enquiry; and your correspondent, "One who Notes," is evidently in favour of a very comprehensive treatment of the subject. Without committing myself to any opinion as to the matters complained of, I am desirous of endorsing your view which favours "fractional" or "sliding-scale" royalties as being fairer than "tonnage" royalties. The elucidation of the whole subject would be promoted if some of your readers would give examples of royalties paid on various minerals in districts they know, and would express their views as to what constitutes a fair royalty under ordinary circumstances. I understand royalties of 1-20th and 1-25th are common enough in Cornwall. Such royalties occasionally occur at collieries, and are considered extremely moderate. They represent but 3d. or 4d. per ton on coal at present market prices. Hard-and-fast tonnage royalties of 9d. and even 1s. per ton are being paid at some collieries. To provide for the latter at 1-20th royalty coal should command 1*l.* per ton at the pit. Where coal is let at so much per acre for a given thickness of seam the system is, of course, just as unaccommodating to varying conditions of trade as tonnage royalties. Any system of basing royalty on profit strikes me as being faulty, in so far as it involves the mineral lord in the misfortune of possible mismanagement, although he has no voice in the conduct of the mine, or in the control of its finances and general business.

Coleman-street, E.C., October 12. W. Morgans.

THE GWERN-Y-MYNYDD LEAD COMPANY (LIMITED).

Sir,—I am pleased to note that operations are about to be resumed at the above company's mines. A short time since I had the pleasure to read a letter from one of the resident agents of the company. After carefully perusing and giving careful consideration to the same, the prediction I formed was that there was a magnificent future for the concern. Having visited the property a short time before work was closed down, with a view of making independent enquiries, I was extremely pleased with the result of my investigations.

This mine is situate about 1 mile from the station of Mold, in Flintshire, in the very heart of a once prosperous mining district, and the unanimous and candid opinion expressed to me by several men of high authority was that it was all but certain of being prosperous again ere many months had passed away. I was asked to court every enquiry in the vicinity of the mines (independently, and of the agents) as to the value of the property, and the probable chance of opening up a profitable and lasting mine, and I must say everybody agreed that there was no doubt about the mine being ultimately successful, as huge deposits of mineral have been discovered, and enormous returns made from the same runs of ore as are known to exist in this company's property, and many expressed their conviction that Gwern-y-Mynydd would eventually prove itself to be the best lead mine in the whole of North Wales. Those interested deserve to be rewarded for the manner in which they have stuck to the concern during a time of depression, perhaps unequalled in the annals of British mining, and also for the pluck in coming forward again with more capital to recommence operations.

I feel confident that no one will regret the further outlay, and that the shares will command a high price in the market.

Willesden, October 14 Cerus.

MEXICAN GOLD MINING.

Sir,—I have just read in the *Financial and Mining Record of New York*, August 29th, some criticisms of Mr. Henry Moon, of your city, on a report of Mr. C. A. Stetefeldt, of New York, said report being on some gold mines in Mexico. As I helped to make the experiments, and have some little experience in gold mining, I think I may be pardoned for writing this in the interest of mining generally, and of the report of Mr. Stetefeldt particularly, as it would appear that Mr. Moon is trying to make a little boom for his amalgamator at the expense of others who have probably forgotten more than Mr. Moon ever knew of the metallurgical treatment of ores. It seems to me unnecessary to say that the process referred to was for a particular class of ore which was very refractory, but which contained $10·80 gold just as it was quarried out of the mountain side, and in a sample lot of 60 tons, and not for ore that contains 11s. 4d. per ton, as the mine referred to in Australia by Mr. Moon.

He does not seem to see any difference between the sulphate of copper in the roasted ore (which Mr. Stetefeldt says will interfere with amalgamation) and the piece of sheet copper used for free milling ores with stamp mills. As to their being any mistake about Mr. Stetefeldt's remark that the bottom of the arrastra should be covered with gold amalgam, there is none whatever. In working silver ores in the arrastra in Mexico this is practised with silver amalgam. Mr. Moon does not seem to see any difference between dry amalgam that Mr. Stetefeldt speaks of using and quicksilver, for he says "the grinding of such a surface (63½ square feet) of quicksilver would result in very great loss of that metal." Everyone who has had any experience would know that, but the very idea of using dry amalgam is that it shall break up and disseminate itself into every part of the charge being ground, and coming in contact with the fine particles of gold take them up. After the charge has been sufficiently ground water can be added, and by running the arrastra a little slowly, the amalgam will settle down on the bottom, and but little pass off into the settlers, or it may all be run into the settler and strained from the quicksilver used there, and put again into the arrastra with a fresh charge of the roasted ore.

That Mr. Stetefeldt has contributed some valuable information regarding the working of refractory gold ores which are not rich there can be no question of doubt, Mr. Moon's criticism to the contrary notwithstanding, his particular fault being that he recommended arrastras instead of Mr. Moon's amalgamators; but it is a well-known fact that arrastras will save a larger percentage of gold than any other process that has ever been invented, but their capacity is limited, but they are particularly well adapted to the wants of the Mexicans, where labour is cheap, and the working of the arrastras is very well understood. It is my opinion that Mr. Moon's amalgamator would be found impracticable on many ores, from its tendency to flour the mercury, and consequent loss of this metal in the tailings.

In conclusion, I wish to say that if Mr. Moon will read Mr. Stetefeldt's report through carefully, he can see from the experiments made that there is no hit or miss about it, but it is as certain of giving the results claimed as anything can be. Neither is it a lazy process, by any means; nor is there any mistake about the price of labour, as 50 c. per day, Mexican money, will hire all the men one can work, and good hands too. In a residence of nearly four years I have always had more labour offered at 37½ to 50 c. per day than I could use.—*Ouray, Colorado, September* 14. E. C. Quinby.

EAST POOL, AND THE CAPTAINS' SALARIES.

Sir,—In last Saturday's Journal I notice the particulars connected with the account meeting at East Pool. The principal topic of discussion, and that which occupied the largest part of the time and attention of the meeting, seems to have been in relation to the salaries of the agents. It appears that in consideration of the manager discontinuing to employ any part of his time in the inspection of any other mine to which he had been occasionally called, and in order thereby that the whole of his time and services might be secured exclusively to East Pool, the committee of management augmented his salary by two guineas a month, and the discussion at the meeting was to whether a guinea a month should, or should not, be added to that of each of the two subordinate captains. This matter had previously occupied the time and discussion of the committee when met in conclave; but finding it too weighty and important to be decided solely by them, thinking, no doubt, that the guinea a month to each of these two captains would be an insupportable drain on a dividend of only 30,000*l.* a year, Mr. Dennis, of Liverpool, the principal shareholder, was consulted, and this liberal-minded, generous, principal shareholder seems to have been of the same mind; his answer was "No," Mr. Henry Rogers, being a gentleman of a more considerate and generous spirit, proposed at the meeting that the guinea should be added to the monthly salary of each of the two said captains, but for his thus infringing upon the business and prerogative of the committee he was roundly rated by Mr. Branwell, one of the committeemen. This is the first time of my understanding that a shareholder in a mine is not to venture to give his opinion at an account meeting. I always thought and found that mine adventurers met together on the account-day, to consider and discuss the business connected with the mine, and that irrespective of any committee. If not, what is the use of the meeting? But Mr. Branwell, the committeeman, seems to be of a different opinion, and to have challenged Mr. Rogers, a shareholder, as to his right to speak, and to have considered him an intruder.

Would it not be well if such men were to step out of their narrow sphere into the outer world for a bit, where they might have room to breathe and learn, to think and speak, like other men—to think, for example, that a guinea a month might, upon a pinch, be squeezed out of 30,000*l.* a year, and not confine their ideas to within a compass more narrow than the peninsula on which they stand? This contraction of mind here displayed, and all the ado made about the two guineas a month out of the 30,000*l.* a year, I am sorry to see in my native county.—*London, October* 14. 'John Lean.

NEW TERRAS.

Sir,—I called at New Terras Mine yesterday to see the progress of the works. The engine-house, for the pumping and reduction works, is roofed, and the engine is in progress of erection therein; the bob being *in situ*, also the cylinder and other portions. It was well that the roof was on before the late storms occurred. There are two other engines on the mine ready for operation when the water is pumped out—the drawing, or whim engine, and the stonebreaker, both of which, as well as the pumping-engine, are as good as new ones. There is a large quantity of materials on ground for future use in the metallurgical department, which the manager (Mr. J. H. James) purchased on very advantageous terms; all of which are paid for. Nearly every article delivered on the mine is paid for, the committee having deemed the maxim "Out of debt out of danger" a sound one. If all the shares had been appropriated, so that cash could be called up on them, the preparations could have been forwarded to completion ere this, and the returns of tin ore made on a large scale. We hope that at the forthcoming meeting the shareholders or some of them, will increase their interest, so that the battery of 100 heads may be expeditiously set to work. In excavating for the boiler-house, the labourers found a large tinstone containing 25 per cent. of tin ore; but the average produce of all the lodes is 30 lbs. of tin ore to 1 ton, which is considered good. The agent informed me that 8 lbs. of tin ore per ton will pay all the costs of raising and dressing. A mine better laid out in all respects cannot be found, and Mr. James deserves great credit for the intelligent judgment manifested in all the arrangements. The annual meeting will be held a few days hence. R. Symons.

Truro, October 15.

MINING IN THE CAMBORNE AND ILLOGAN DISTRICT.

Sir,—Although I have no personal interest in the mines in this district it affords me very great pleasure to find the improving condition of some which have been "calling" mines. West Basset is likely to give profits at an early date, also Wheal Basset, South Frances, and West Frances. It is well that the patience of the shareholders did not fail either in the mines just named or in Wheal Agar. The shareholders in Wheal Agar, who expended about 100,000*l.*, will no doubt be reimbursed in process of time with ample interest. I should be glad to see Carn Brea, Tincroft, and Cook's Kitchen on the Dividend List again.—*October* 13. B. S.

SALARIES OF MINE AGENTS.

Sir,—The managers and agents of mines are better paid than they were 50 years ago, and properly so. I remember the manager of Wheal Vor (Captain Thomas Richards), who was also the engineer, received 12 guineas per month, all the other agents six guineas each. None of the underagents were admitted to the dinner-table with the shareholders; they dined in the kitchen. The highest salary given in the Camborne district, until recently, was that to the late Captain Josiah Vivian, North Roskear Mine, who had 20 guineas per month for about 40 years, besides several salaries from other mines; but he was a great speculator and lost largely. The manager of Polberon 45 years ago received 20*l.* per month. The rule with the late Mr. John Williams, of Scorrier, was to pay his agents each 8*l.* 4s. per month, mine clerks the same. The manager of East Crinnis, under Messrs. Taylor, received 12 guineas per month.

At the present time the managers are better paid, I know one who receives 500*l.* per annum from one mine, and about six guineas each from four others, with liberty to go where he likes to inspect and value. Besides he is mineral agent for two or three landowners. I know another who as purser and manager of three mines receives about 800*l.* per annum. A year or two ago the salary of the manager of East Pool was raised to 20 guineas a month. A few days ago a further advance was made of two guineas per month—in all 23 guineas per month, thirteen months in the year, making his income about 300*l.* per year. But he is prohibited from attending to any other mine, and from reporting on mines. He has the best mine in the county, but not the best position. He is a first-class manager. The sub-agents had an advance of a guinea per month to their salaries. I like to see agents well paid—they deserve it.—*October* 14. Observer.

SIMULTANEOUS BLASTING.

Sir,—In your interesting leader of the 10th inst. on "Electricity in Mines," you again refer to the important advantages in economy and speed gained by the adoption of simultaneous blasting. We entirely agree with the now generally received opinion in favour of the simultaneous blasting of a number of holes under a variety of circumstances, but we venture again to point out to your readers that these advantages are not, as might be assumed from your article, to be obtained solely by electric agency. We beg to refer to a long correspondence on this subject, which appeared in your paper in the months of May, June, and July of last year, wherein it is claimed that this simultaneity of ignition can be most cheaply and readily obtained by the use of Bickford's Patent Igniters and Instantaneous Fuses. It should be unnecessary for us to repeat the arguments and illustrations then advanced, but we may also refer your readers to your own issue of the 26th ultimo, with its very interesting account of Messrs. Nobel's Explosives Company's experiments last month at Minera Quarries, North Wales, where the firing was entirely effected by the above appliances with most striking results.

It may be added that our invention has, since the last correspondence referred to, been awarded the Gold Medal at the International Inventions Exhibition, and, with the assistance of this additional publicity, is being increasingly adopted for mining and engineering works at home and abroad. An interesting reference to the Patent Igniter, as exhibited at the above Exhibition, will be found in the Journal of the Society of Arts for the 9th October from the able pen of Dr. Le Neve Foster. Bickford, Smith, and Co.

Tuckingmill, Cornwall, October 15.

DYNAMITE.

Sir,—Allow me through the medium of your widely-circulated Journal to call the attention of all interested in mining to the present exorbitant price of this explosive. The price of tallow (28s. 6d. per cwt.) and other ingredients necessary to the manufacture are exceedingly low. The profit on dynamite at the present time cannot be much less than cent. per cent.

It is high time that consumers combined to Boycott the ring of extortioners, and found a factory in Cornwall. Until we look after our own interests we may expect to be victimised. Two or three eligible sites exist suitable for a small manufactory sufficient to meet the wants of Cornwall and Devon.

Anyone disposed to join a limited company may communicate with Mr. Edward Ashmead, 2, Drapers' Gardens, London.

October 14. H. Waddington.

SOUTH STAFFORDSHIRE INSTITUTE OF IRON AND STEEL WORKS MANAGERS.

The second meeting of the present session of the South Staffordshire Institute of Iron and Steel Works managers was held at Dudley, on Saturday, when Mr. R. Smith-Casson (President), presided over a large attendance. Two new members were elected. Mr. M. Miller moved that in future gentlemen desirous of becoming members of the Institute should fill up a prescribed form similar to the practice adopted by the Iron and Steel Institute and other associations.—Mr. W. J. Hudson seconded the proposition, but upon the motion of Mr. H. Fisher (vice-Chairman), a vote upon the proposition was delayed for a month. A paper "Upon the Development of Telephony," was read by Mr. A. E. Cotterell, of Birmingham, formerly inspector in charge of the National Telephone Company (Limited), Birmingham centre. The paper was an exhaustive one, and was illustrated by experiments and diagrams. In the course of his address Mr. Cotterell expressed the opinion that the mechanical telephone, about which so much had lately been heard, would not supersede the electrical telephone for speaking over long distances. He said this after the result of experiments. The telephone had not only now become a great convenience, but almost a necessity, and the National Telephone Company intended soon to start an exchange at Dudley. Mr. Cotterell aroused the enthusiasm of his audience by describing the work of Professor Bell, which culminated in his patent of February 14th, 1876, just a few hours before Mr. Elisha Gray went to the Patent Office with a similar invention. By Prof. Hughes's microphone the ticking of a watch could be heard over 60 miles of wire, and thanks to the induction coil, no more power was required to speak through Edison's microphone at a distance of 200 miles than to speak a few yards. By Blake's microphone, which was the best transmitter ever introduced, he had whispered perfectly distinctly over 75 miles; others had spoken at distances up to 300, 400, and even 600 miles, and last year communication had been carried on between Chicago and New York at a distance of 1000 miles. (Loud applause.) In conclusion, Mr. Cotterell entered into a defence of the overhead wire system. The fears of the public were imaginary rather than real. The decrease of late years in the severity of thunderstorms might be said to be due to the increased number of overhead wires which had acted as lightning conductors. (Applause.) Where many wires were running together, the underground system was, for telegraph purposes, the cheaper. In the discussion which followed, Mr. W. Edwards said that he should have been more pleased if Mr. Cotterell had given his unanimous vote to put the wires underground, as that would be better for the iron trade. (Laughter.) On the same ground he was sorry to hear that the companies were now using wire of a much smaller gauge than formerly. (Laughter.) Mr. H. Fisher asked for Mr. Cotterell's opinion on the invention which, according to recent newspaper intelligence, had been brought out in America for transmitting telephone messages by the submarine telegraph cables. Mr. Cotterell replied that if the new invention was being worked out upon the system that the brief accounts in the papers spoke of, it would not, in his opinion, prove a success. The difficulty which stood in the way was not the creation of greater transmitting power than at present, but the law of electro-static induction, which demanded a different system of telephone. A hearty vote of thanks to Mr. Cotterell concluded the meeting.

A New Coal Getting Machine.—On Monday, at a meeting of the members of the North Staffordshire Mining Institute, at Stoke-upon-Trent, Mr. Mould, of White Barn Colliery, near Newcastle-under-Lyme, exhibited for the first time in public a machine which he has invented and recently patented for coal getting. The machine comprises a mandrel or centre bar, with side pieces according to the length of the centre bar; a ratch spanner, a tube, and a power block. The mandrel consists of a screw pin, 18 in. long and 1½ in. in diameter, at the end of which there is a collaring and a recession, which in thickening out forms an inclined plane, 12 in. long, and so on, for every 12 in. required. The mandrel is fitted with side pieces, these side pieces being segments of a circle. In this form it is placed in the hole prepared for it. A tube is then placed over the screw with its flange or foot against the solid face, the screw projecting sufficiently at the top of the tube to receive a nut. The tube thus becomes the basis of the pressure with the top end against the nut, and the bottom end against the face. The tube is made of wrought-iron, and is 15 in. long from top to bottom; 3 in. diameter inside; sunk at the top end to 2 in. diameter, slightly collared, on which the nut turns. The bottom is provided with a flange 2 in. broad, thus forming a foot 7 in. diameter. The details of the construction may be varied without departing from the principle on which the invention is based; and the size and number of the parts employed may vary according to the material to be operated upon. Mr. James Lucas, the ex-President of the Institute, said he had seen a good deal of the machine, not only since its completion, but before it was perfected, and he could testify to its utility. A vote of thanks was accorded to Mr. Mould for having brought the machine before the notice of the members, and a paper which he read on the subject was ordered to be printed.

Tramways.—The closing prices of this evening, as quoted by Mr. Wm. Abbott, of Tokenhouse-yard, are given in tabular form in the stock and Share List page of the Journal.

Trade Reports.

CORNWALL.

October 15.—There is no more real reason to anticipate a change in the position of mining affairs so far as they are connected with the tin market now than there was last week, though there is apparently a desire in certain quarters to produce a contrary impression. No doubt there are not a few parties who would be far more benefited by a direct fall in prices than by the indisposition to speculate, which is now the leading characteristic of matters in the county, but that is no reason why holders should allow themselves to be persuaded that prospects are worse than they really are. It is almost an absolute impossibility that there can be any material reaction of trade until the election is over, and this must be taken into account by every prudent mining investor. To hold our own under existing conditions is really a satisfactory state of affairs, and a good omen of future activity.

The attempt made by Mr. Daubuz to say a good word in favour of Protection has not had very much effect in a business point of view, though it has been already utilised for political purposes. There is a very general feeling that after all this is more a miner's question than a smelter's, and the suggestion has been made that the real effect of such a proposal is to divert attention from the mining reforms which are so urgently needed in connection with mining tenure and the like, and which can be carried out without any interference with the course of trade. What good result could follow from the adoption of Mr. Daubuz's suggestion has not yet been shown. Colonial competition, it is understood, would remain the same as ever, and as the only effect of artificially raising the price of English tin by putting a duty on foreign would be to hand over all the foreign tin trade to our competitors, and restrict English tin absolutely to home consumption. The proposal is one that hardly needs to be met with argument, nor need we stay to consider the other objections.

Dolcoath, again, as was contemplated, scores heavily. A profit on the three months of 9485*l.* means just 4000*l.* a year, after paying at the rate of 8000*l.* annually to Mr. Basset—that is to say, 20 per cent. upon the net returns. The shareholders acted with sound discretion in limiting their dividend to 30s., and in applying 2500*l.* towards clearing off that valueless asset tutwork and wages. Mines generally are paying more attention than was the case a few years ago to putting their financial status in a sound position, and though there is much yet to be done in this particular circumstances render it somewhat difficult at all times to move quickly, and we must be content with the fact that progress is being steadily made.

As to the report, it is just one of those to which Dolcoath has accustomed its adventurers. As we pointed out the other day, the old "bal" is the deepest metal mine not only in Cornwall but in the kingdom, and thus we have the lode in the bottom of the shaft reported on as of unknown width, but worth 100*l.* per fathom so far as it is known, while Captain Josiah Thomas states that at the present bottom level—the 375—the lode has been opened on a continuous course of tin for 160 fms. in length, and 3 to 4 fms. wide, so that in the next few months the tin ground laid open there will be worth literally hundreds of thousands of pounds. Such facts and figures really call for no comment. What seems to us a most encouraging feature is the belief that the time is not far distant when Dolcoath will be found to have several more companions in prosperity than it has at present. There is very good reason to believe that what has happened and is happening here will, for example, be repeated at Devon Great Consols.

Mr. J. H. Collins, F.G.S., has just undertaken an exceedingly good and useful work—the preparation of a practical dictionary of English and foreign mining, and metallurgical and mineralogical terms. There is no doubt that our practical men, as well as our scientific, stand in need of such a manual of comparative mining technology, and it should have, and no doubt it will, a hearty reception. Mr. Collins' qualifications for such a work are well known.

LANCASHIRE.

October 15.—A generally dull tone continues throughout the Iron Trade of this district. In pig-iron there is extremely little business offering, and certainly no buying at the full prices quoted by makers. For local brands makers still quote 39s. to 39s. 6d., and for district brands 38s. 6d. to 39s., less 2½ delivered equal to Manchester, but any business doing is at fully 6d. to 9d. under these figures, and sellers are showing more disposition to entertain offers at under current rates. In outside brands low offers are also being accepted to secure orders, and and best-named brands of Middlesborough foundry are to be got at about 41s. 6d. net cash, delivered equal to Manchester. Finished iron meets with a moderate hand-to-mouth sale, which keeps the forges about fully employed, but prices are on the low basis of 5*l.* 5s. for bars, 5*l.* 15s. for hoops, and 6*l.* 15s. to 6*l.* 17s. 6d. for local made sheets delivered into the Manchester district, whilst Northcountry plates are offered for delivery here at 5*l.* 5s. per ton. The steel trade, with the exception that there is a moderate business doing in boiler plates, is extremely quiet in all departments, and hematites are being offered at almost as low prices as ever, good foundry qualities delivered here being obtainable at about 51s. 6d. per ton, less 2½. The condition of the engineering trades is unchanged, slackness still characterises nearly all departments; the completion of old orders affords pretty full employment in some cases, but unless it is on specialities it is very exceptional where any real activity is being maintained. In the coal trade, although there is still a fairly good demand for house fire consumption and in the better qualities of coal, the pits are being kept on about full time, business has fallen off considerably since the commencement of the month, and all classes of fuel for ironmaking, steam, and engine purposes continue bad to sell, and low in price. In the house fire coal trade the demand, considering the time of the year, is only moderate, and prices are not more than steady at late rates, best Wigan Arley only in exceptional cases fetching more than 9s., second qualities and Pemberton Four-feet 7s. 6d., and common house fire-coals 6s. per ton. Common round coals, for steam and forge purposes, average about 5s. 6d. at the pit, but less than this is taken to secure orders, and common through and through coal is being sold at extremely low figures. Engine fuel continues a durg on the market, and heavy stocks of slack are accumulating at most of the collieries. Burgy averages about 4s. 6d. to 4s. 9d., and best slack is quoted at 3s. 6d. up to 4s. per ton, but ordinary qualities can be bought in bulk for prompt delivery at from 2s. per ton upwards.

The Shipping Trade has been only quiet, and good qualities of steam coal, delivered at the High Level, Liverpool, or the Garston Docks, are not fetching more than 7s. to 7s. 3d. per ton. The wages agitation seems now to be waiting for the next step on the part of the men; the circulars which were sent out requesting an advance of 15 per cent., have received the only response which could have been expected, and it is probable the men will now be recommended to adopt a system of short time and restricted output.

NORTH AND SOUTH STAFFORDSHIRE.

October 15.—Not just yet are the winter prices to be declared upon the Cannock Chase coal field. The leading owners have held an informal meeting, and have determined for the present to leave prices as now. How long this state of things will continue depends in much part upon the colliers. The action of the men is fraught with some importance, since should they put on a bold front in any effort to get a 15 per cent. advance at a time like the present, when the house coal season is in their favour, prices would very possibly be early openly affected. The slack trade shows a steady increase. Underselling still prevails, but list prices are unaltered upon the following basis:—Forge coal, 8s.; furnace and household coal, 9s. 6d. to 10s. per ton; kibbles, 6s. to 7s. 6d. per ton; slack, 4s. to 5s. 6d. per ton. Pig-iron sellers are pretty content with the large contracts which they have of late secured in advance of a rise in prices. They are not, therefore, disappointed that business should this week have fallen rather dead. Indeed, this is generally the case immediately after the Quarterly Meetings. Hematites are stronger than most pigs at 53s. to 54s., delivered for forge sorts, and 56s. to 57s. for West Coast Foundry sorts, delivered. Native all-mines are 55s. to 57s. 6d., and common pigs, 32s. 6d. to 35s. The manufactured iron trade is without alteration on the week.

John Perry Jones, owner of the Neachills Bridge Colliery, was, at the Wolverhampton Police-court, on Wednesday, fined in all, 2*l.* 7s. 6d., exclusive of costs, for disregarding four sections of the Mines Regulation Act. The first charge was for neglecting to provide separate apparatus at each shaft for lowering and raising purposes. He was next summoned for failing to keep in the office of the mine an accurate plan of the workings of the colliery, and again for neglecting to keep a report of the ventilation. The fourth charge was failing to have a record of the results of the weekly examination of the shafts and guides. Joseph Bould, owner of the Moseley Hole Colliery, near Wolverhampton, was fined 1*l.* and costs for neglecting to have a separate lowering apparatus at each shaft.

SOUTH WALES.

October 15.—The returns of coal shipments for the month of September at the principal South Wales ports do not show any considerable falling-off as compared with the previous month, although as compared with the months of March, May, and June, the declension is considerable. There were, however, exceptional reasons for those heavy shipments, as the contingency of war with Russia caused large amounts to be sent to the East. The amount sent away from Cardiff last month was 543,937 tons foreign and 94,150 coastwise, with 20,701 patent fuel, and 1920 coke; Newport, 126,921 tons foreign and 94,642 coastwise; Swansea, 62,570 tons foreign, and 46,606 coastwise, with 10,952 tons patent fuel. The amount for the first nine months of the present year shows a falling-off of 55,000 tons at Cardiff, an increase of 107,000 tons at Newport, and a falling-off of 115,000 tons at Swansea. Totals for nine months:—Cardiff, 5,378,179 tons foreign and 803,336 coastwise, with 36,576 tons coke, and 179,752 patent fuel; Newport, 1,377,625 tons foreign, and 830,220 coastwise, with 2121 tons coke; Swansea, 628,605 tons foreign, and 256,058 coastwise, with 2667 tons coke, and 223,986 patent fuel. The amount sent away last week from Cardiff was 119,351 tons foreign, and about 23,000 coastwise, with 2432 tons patent fuel; Newport, 20,028 tons foreign, and 21,740 coastwise; Swansea, 13,351 tons foreign, and about 11,000 coastwise, with 2995 tons patent fuel. Trade, on the whole, is dull; but there are signs of improvement in the house coal trade, as well as in small steam coal and patent fuel. Few of the collieries are working full time, and some are only doing three days a week.

Another new vein of coal has been struck in the Ynysybwl Valley by Messrs. Beith. The former one was 6 ft. 9 in. in thickness; this one is 6 ft. 6 in. It is anticipated that at about 30 or 40 yards below this the 9 ft. seam will be struck.

The amount of iron and steel sent away in the month of September from Cardiff was 5314 tons; Newport 6671, Swansea, 255. The totals for the first nine months of the year were:—Cardiff, 52,959 tons; Newport, 87,863; Swansea, 3126. Last week the amount exported from Cardiff was 2132 tons; Newport, 970 tons to Cape Town, and 29 to Aracaja. Iron ore has arrived at Cardiff from Bilbao to the extent of 6964 tons, and 116 from other places; Newport received 3930 from Bilbao, and 6050 from other places. A slight improvement is reported in this trade.

The Tin-plate Trade is improving, in consequence of the lessening of the output. Prices have risen the last few weeks 2s. per box.

TYNE AND WEAR.

October 15.—The Coal Trade does not show much change. There is still a fair demand for best steam coal at 8s. 6d. per ton; second qualities at about 8s. per ton. There is a good demand for gas coals, and shipments of these coals continue large, both coastwise and foreign. House coals have now a decided upward tendency, and are at about 9s. per ton. Small steam coals are in strong demand at 3s. per ton. Manufacturing unscreened coals are in strong demand, at 6s. to 7s. 3d. The coke trade generally continues in a very unsatisfactory state, but this is mainly owing to the deficient demand for inland consumption The demand for export abroad is improving. From the Tyne of late the exports have averaged 7000 tons weekly, an increase on the quantity for last year. From the Wear they have also slightly increased, and are now 1100 tons weekly. From West Hartlepool they have been 1200 tons, and from Middlesborough 1900 tons.

The death of Mr. John Bowes, of Strathmore Castle, at the ripe age of 74, has caused much regret here. Mr. Bowes was one of the largest landowners in this country, and also a large owner of coal royalties in this district. He has also long been at the head of the colliery firm of John Bowes and Partners, one of the largest colliery companies on the Tyne, Mr. C. M. Palmer being managing owner of the firm. At one time about 15 collieries were in full work, the property of this company, and the annual output of coals was about 2,000,000 tons, but recently, owing to untoward circumstances in connection with some of the works, the output has been reduced to some extent. On the north side of the Tyne the Gosforth Colliery was worked by them, and also the Old Killingworth Pit, and at these works the High Main seam was worked, which produced first-class Wallsend house coal. These two important collieries were, however, closed some time ago, and the company now only have the Dennington and Seaton Burn Collieries at work on the north side of the Tyne; they are, however, good works, producing very good class steam coal. On the south side of the Tyne the company hold very extensive royalties, and also work, at present, a number of important collieries. A considerable tract of coal near Gateshead is now lying dormant, as the pits are flooded by water, but this water will, no doubt, be removed at some future time, and a large field of coal made available. The colliery nearest the Tyne now worked by this company is the Old Felling Colliery, one of the oldest works on the Tyne, but there is still a considerable amount of coal remaining in the upper seams, and also some coking coal in the lower seams below the Hutton seam. Moving eastwards we reach the Wardley Colliery, an extensive work situated in a grand field of coal; but, unfortunately, its success has been considerably marred by the occurrence of numerous faults or dykes which intersect the field on the south side of the shafts mainly, and those dykes have caused so much trouble and expense as at times to threaten the existence of the colliery. At the present time the colliery is only partially worked, and producing about 800 tons of coal per day. At one time only recently about 1500 tons was produced lately. On the south side of Wardley lies the extensive and important Usworth Colliery, which has lately been acquired by this company. It will be recollected that a serious and disastrous explosion occurred at these works a short time ago resulting in a serious loss of life and great destruction of property. There are several seams of excellent coal which have been extensively worked, but a great amount still remains to be worked. The extensive Hutton royalty here which is in great part whole, is the property of Mr. Bowes. Three miles west of this point we have the Springwell Colliery, the property of this company. The famous Hutton seam here was in excellent order, but it has been exhausted, the upper seams—the Low Main and Maudlin seams are now worked, and they produce good steam coals. The lower seams below the Hutton seam have not yet been proved here, but as the Harvey seam has been proved of good section at the Heworth Colliery, north of Springwell, the lower seams will probably be proved at the latter colliery at some time in the future. Three miles west of this station the Kibbelsworth Colliery is situated, and it has been long worked profitably by this company. It still contains a considerable quantity of excellent coal, mainly gas coal, but there is also very good steam and house coal seams. A few miles northwest of this point we have the Marley Hill group of collieries which have been long worked by this company—those are the Marley Hill, Andrew's House, Beyer Moor, Burnopfield, and Depton Collieries, about seven working pits which produce a large quantity of coal, the bulk of those coals being converted into coke. The Marley Hill coke is well known in all the home markets, and also on the foreign markets of the world, as a first-class article of the kind. It was first used extensively on the English railways when those railways were first developed, and as raw coal was gradually introduced for use in locomotives in the place of coke; the coke was sold to iron smelters in this and other countries.

COAL SHIPMENTS TO LONDON, &c.—The shipments from Tyne Dock for the week were 115,056 tons, an increase of 8429 tons over the corresponding week of last year. The shipments from Sunderland to London were also very heavy during the month of September, and the indications for the present month are still better. This is a very critical time for the coke trade, as the annual contracts are now made; it is, therefore, cheering to note that there are some slight signs of activity in this trade. The reports from the hematite ironmakers on the West Coast are a little more cheering than they were. Spain is beginning to purchase with more freedom, and there is a greater disposition on the part of local smelters of iron to buy coke for supplies ahead. Little has been done as yet in contracts for next year, but sellers are asking rather higher prices, and the hope of better trade next year seems to favour their views. The late prices of coke have certainly been much too low. The iron trade continues dull, and the tendency still is to weakness. The Quarterly Meeting has had no beneficial effect, rather the reverse. Stocks, however, declined 781 tons last month, and there has been good shipments during the past few weeks. The delivery to Scotland and to Germany has been large for the winter stocks. Merchants are willing to sell six months ahead, which is an indication of the state of the trade. Warrant holders are also offering iron at 9d. per ton lower rates. The manufactured iron trade is in a very dull and lifeless condition; the hopes entertained a month ago have not been realised, far from it. Quotations only repeat late figures. Messrs. Connals stocks are 103,287 tons, an increase of 2479 tons upon the week. The coal and coke trades at Middlesborough continue without animation.

The gathering of local shipowners, held in Newcastle, on October 7, was well attended, and it is expected that the combination likely to be formed will lead to useful regulations in connection with this important branch of trade. There was a large attendance of shipowners from Sunderland, Newcastle, and other ports, and the tone of the proceedings were decidedly in favour of attempting some charter party reform. The present hostile regulations are likely to be vigorously attacked. Some doubts have been expressed that a combination of this kind would prove to be illegal, but little weight is attached to this idea. The various phases of the shipping question having been discussed and various suggestions having been made, it was decided to call a general meeting of shipowners in Newcastle, on Wednesday, and at that meeting it is expected that the whole question will be dealt with in a practical way. It is expected that a large majority of owners in that district will be in favour of the combined action. The shipping trade continues to improve, although the movement is slow. In the freight market there is a good deal more business on the coast. Shipments of coals are especially heavy, and there is at this moment a scarcity of suitable vessels. Freights have advanced 3d. per ton to some points, and the homeward freights from the Black Sea, &c., have also improved.

PALMER'S SHIPBUILDING AND IRON COMPANY (LIMITED).

The following table, prepared by Mr. S. N. CALLONER (Member of the Stock Exchange), 62, Grey street, Newcastle-on-Tyne, shows the progress of the company during the last seven years —

Year ending 30th June.	Net Profits.	Discount p. cent. per annum.	Reserve Fund.	Written off each year for depreciation and extension.	Balance carried forward.	Price. A Highest	Price. A Lowest	Price. B Highest	Price. B Lowest
1879.....	£14,128	3	£20,000	£6,209	£1,035	18½	24	9	17½
1880.....	56,565	3	32,000	9,000	566	21	30	14½	19¼
1881.....	67,288	4	80,000	15,000	801	25½	30	17½	21
1882.....	79,344	6	60,000	15,000	1,093	23⅞	31½	15¾	22
1883.....	198,770	6	120,000	60,933	2,356	26	30½	16⅞	21
1884.....	126,938	6½	150,000	25,000	5,244	23½	17	13⅛	17¼
1885.....	13,324	—	150,000	—	20,749	20	24½	12½	15

QUEENSLAND TIN EXPORT.—The respective Sub-Collectors of Customs at Cairns and Port Douglas kindly furnish the following information:—The quantity of tin ore shipped from Cairns during the month of July, 1885, was 76 tons; and that from Port Douglas 83 tons 7 cwts.; making a total export of tin ore in July of 159 tons 7 cwts. Referring to the above, the local price of tin ore is about 50*l.* per ton, which is increased at Port Douglas and Cairns by the amount of carriage paid thereto, while at the first-named place a considerable quantity of ingot tin is received from Irvinebank which again may be computed at 85*l.* per ton. Hence, the Customs value of the article is considerably under the commercial one, and basing the export from here upon the figure paid will give a round sum for July of 7975*l.*, calculating ingot tin at the same price as tin ore.

HOLLOWAY'S OINTMENT AND PILLS—EVER USEFUL.—The afflicted by illness should look their diseases fully in the face, and at once seek a remedy for them. A short search will convince the most sceptical that these noble medicaments have afforded ease, comfort, and oftentimes complete recovery, to the most tortured sufferers. This ointment will cure all descriptions of sores, wounds, bad legs, sprains, eruptions, erysipelas, rheumatism, gout, and skin affections. The pills never fail in correcting and strengthening the stomach, and in restoring a deranged liver to a wholesome condition, in rousing torpid kidneys to increase their secretions, and in re-establishing the natural healthy activity of the bowels. Holloway's are the remedies for complaints of all classes of society.

FOREIGN MINING AND METALLURGY.

The depression which has so long prevailed in the French Iron Trade still continues, and has, if anything, become more decided; indeed, it appears to be thought that merchants' iron will shortly go to 5*l.* 4s. per ton. Pig has remained at about its former level, but the production has been so much reduced that stocks have been brought within rather narrower limits. Pig from the Luxembourg and Loraine has been sold in France upon rather a considerable scale, and at prices so low that the blast-furnaces of the East of France have not been able to struggle against it, and have even preferred to stop work rather than to sell at a loss. The production of pig in the Zollverein in August amounted to 315,404 tons, or 7630 tons more than the corresponding production in August, 1884. The number of furnaces in blast in Germany appears to have been also slightly increasing of late. The progress observable in the production of pig in the Zollverein in August this year, is due solely to a larger output of Thomas pig during that month. The aggregate production of pig in the Zollverein in the first eight months of this year was 2,503,527 tons, as compared with 2,384,623 tons in the corresponding period of 1884. An adjudication of steel rails and railway plant has just taken place at Strasburg for the German State lines. Tenders were only submitted by Rhenish and Westphalian works, and the prices at which tenders were sent in were extremely low, the fall being from 8s. to 10s. per ton as compared with April, 1885. Orders have just been given out for 30 locomotives for the Roumanian State Railways.

The Belgian Iron Trade has presented rather a weak appearance. Prices have not experienced any actual fall, but they have been somewhat feebly maintained; indeed, the quotations published are subject to more less marked concessions, according to the importance of the orders given out. English pig has made 1*l.* 16s. 8d. per ton, and Luxembourg casting pig, 1*l.* 17s. 6d. per ton. In the Charleroi district the little special pig used is supported at 2*l.* 11s. 6d. per ton. In the Belgian Luxembourg refining pig has gone to 1*l.* 12s. per ton. As regards iron No. 1 has been quoted at 4*l.* per ton for exportation, and a similar price has been established upon home account. No. 2 has made 4*l.* 8s. per ton, and No. 3, 4*l.* 14s. per ton. Girders have ranged from 3*l.* 18s. to 4*l.* 6s. per ton. Plates, after having shown considerable weakness, have been in rather more demand, and No. 2 have made 5*l.* 4s. per ton upon home account. No. 3 have brought 6*l.* per ton, and plates of commerce have made 7*l.* 12s. per ton. The Belgian Vicinal Railways Company has decided upon giving out an order for steel rails. It was at one time in contemplation to enter into contracts for the supply of 30,000 tons, but the order was ultimately reduced to 10,000 tons, 3100 tons going to the John Cockerill Company, 2300 tons to the Thy-le-Chateau Company, 2200 tons to the Angleur Company, 1300 tons to the Ougrée Company, and 1100 tons to La Louvière. It is understood that the John Cockerill Company has just received an order for 10,000 steel sleepers from the Midland Railway Company (of England).

There has been scarcely any change in the Belgian Coal Trade, except, perhaps, that the sale of household qualitites begins to revive to some extent. The imports of coal into Belgium to August 31 this year amounted to 789,492 tons, as compared with 778,551 tons in the corresponding period of 1884. In these totals English coal figured for 179,088 tons, and 165,742 tons in the corresponding period of 1884. The imports of coke into Belgium to August 31 this year were 15,745 tons, as compared with 23,629 tons in the corresponding period of 1884. The exports of coal into Belgium in the first eight months of this year amounted to 2,683,005 tons, as compared with 2,894,542 tons in the corresponding period of 1884. In these totals the exports to France figured for 2,471,810 tons and 2,724,054 tons respectively. The exports of coke from Belgium to August 31 this year were 563,754 tons, as compared with 566,538 tons in the corresponding period of 1884. It will be seen that the coal exports of Belgium have declined about 10 per cent. this year, while the exports of coke have been about maintained at their former level. The number of trucks carrying coal and coke which passed over the Belgium State Railways in the week ending September 28 was 18,409, as compared with 17,379 in the corresponding seven days of 1884, showing an increase of 1030 this year. The German coal trade presents much the same tone as for some weeks past, and no important change is anticipated for some time. Prices are generally weak, except for gas coal.

NEW SOUTH WALES.

Sir Saul Samuel, the Agent-General for New South Wales, has received a telegram from Sydney, dated Monday, stating that there has been a change in the administration, the Hon. G. R. Dibbs being Treasurer and Premier, and Sir Patrick Jennings Colonial Secretary. The Cabinet is now as follows:—

The Hon. G. R. Dibbs	Treasurer and Premier.
Sir Patrick Jennings, K.C.M.G.	Colonial Secretary.
The Hon. Mr. Abbott	Lands.
The Hon. Mr. Badgery	Works.
The Hon. Mr. Wright	Mines.
The Hon. Mr. Trickett	Public Instruction.
The Hon. Mr. Farnell, with a seat in the Upper House	Justice.
The Hon. J. H. Want	Attorney-General.
The Hon. Mr. See	Postmaster-General.

COMMERCIAL FAILURES.

The number of failures in England and Wales gazetted during the week ending Saturday, October 10th, was 72. The number in the corresponding week of last year was 59, showing an increase of 13, being a net increase in 1885, to date, of 581.

The failures were distributed amongst the following trades, and, for comparison, we give the number in each in the corresponding weeks in 1883 and 1884:—

	1885.	1884.	1883.
Building trades	6	6	21
Chemists and druggists	1	1	1
Coal and mining trades	2	—	7
Corn, cattle, and seed trades	3	—	5
Drapery, silk, and woollen trades	7	7	7
Earthenware trades	—	—	3
Farmers	1	7	2
Furniture and upholstery trades	—	2	1
Grocery and provision trades	13	10	35
Hardware and metal trades	1	1	4
Iron and steel trades	3	2	5
Jewellery and fancy trades	4	1	10
Leather and coach trades	4	1	13
Merchants, brokers, and agents	3	5	12
Printing and stationery trades	4	3	—
Wine, spirit, and beer trades	13	7	24
Miscellaneous	7	6	17
Totals for England and Wales	72	59	167
Scotland	37	24	23
Ireland	3	3	6
Totals for United Kingdom	112	86	196

The number of Bills of Sale published in England and Wales for the week ending October 10 was 249. The number in the corresponding week of last year was 238, showing an increase of 11, being a net increase in 1885, to date, of 578. The number published in Ireland for the same week was 25. The number in the corresponding week of last year was 18, showing an increase of 7, being a net increase in 1885, to date, of 38.—*Kemp's Mercantile Gazette.*

Meetings of Public Companies.

DOLCOATH.

A three-monthly meeting of shareholders in Dolcoath was held on Monday, the Rev. W. W. Butlin presiding.

The statement of accounts showed that the labour costs were 10,708*l.* 12s.; tribute, 1883*l.* 10s.; merchants' bills, 5602*l.* 14s.; Camborne parish rates, 368*l.* 10s.; Great Western Railway, 118*l.* 15s.; water rents for year, 137*l.* 4s.; Stannary dues (one quarter), 32*l.* 4s. The tottal debits were 18,851*l.* 10s. On the opposite side, 593 tons 12¾ cwts. tin realised 30,261*l.* 4s. This amount, less dues to Mr. G. L. Basset, at 1-15th, 2017*l.* 8s.—was 28,243*l.* 15s.; extra carriage, 93*l.* 10s.=28,337*l.* 6s. This gave a profit of 9485*l.* 16s., and increased the credit balance to 9574*l.* 8s.

The Chairman: The committee recommend that a dividend of 30s. per share be made. This will admit of the whole of the old tutwork and wages account, amounting to 2468*l.* 8s. 10d. being written off—(applause)—carrying forward the balance of 55*l.* 19s. 9d. I beg to propose that the statement which has been read be accepted, that a dividend of 30s. per share be declared, and that the balance be carried forward to pay off the 2468*l.* on the wages and tutwork account.——Mr. Bailey seconded.

The agents (Capts. Josiah Thomas, James Johns, Joseph Chynoweth, John Williams, and Edwin Prideaux) reported:—The engine-shaft is sunk upwards of 16 fms. below the 375. We are now engaged in cutting the plot, &c., preparatory to driving east and west at a depth of 15 fms. below the 375, which we intend calling the 388 fm. level, as the shaft is measured on the line of the lode. The bottom of the shaft is worth 100*l.* per fathom for 12 ft. in length, but the size and value of the lode to the north and south of the shaft are not known. The winze under the 375, east of engine-shaft, is sunk 9½ fms., and is worth for 9 ft. long 100*l.* per fathom. The winze under the 375, west of engine-shaft, is also sunk 9½ fms., and is worth for 9 ft. long 50*l.* per fathom. The 375, west of Old Sump, is worth 25*l.* per fathom. This end is now 35 fms. west of Old Sump shaft. The 375, east of new east, produces tinstuff of a low quality. Another part of the lode is standing by the side of the level. The 364, east of new east, is not of much value. Harriett's shaft is sunk 13¼ fms. below the 326. We shall shortly commence to drive at the 338 fm. level, and shall in all probability meet with productive ground by driving a little distance west. The 326, west of man-engine-shaft, is worth 20*l.* per fathom. The 314, west of man-engine shaft is worth 12*l.* per fathom. The 314, east of Harriett's shaft, is at present unproductive. The 295, east of Harriett's, is worth 10*l.* per fathom.—South Lode: The 302, east of cross-cut, is producing a little tin. In the 302 west the lode is disordered by elvan. The 290, west of cross-cut, is worth 50*l.* per fathom. The 242, east of cross cut, is worth 18*l.* per fathom. The 242, west of cross-cut, is worth 12*l.* per fathom. The 238, west of cross-cut, at Stray Park is not of much value. The eastern shaft is being enlarged below the 125 fm. level.

Capt. Josiah Thomas, in supplementing the report said: In reference to the accounts you will see that we made a profit on the first 12 weeks sufficient to make a dividend of 2*l.* per share, and rather over. (Applause). Considering that the mine is nearly ½ mile deep, that we have three pumping-engines at work, that we have paid 2000*l.* and more for dues, and 368*l.* for parish rates, and also that we have no mineral but tin, no copper or arsenic, or any other mineral, I think a profit of 9400*l.* in 12 weeks, on tin a little over 50*l.* per ton, is simply wonderful, and something never done, or approached in Cornwall before. (Applause.) I am glad that the committee have recommended, and that you have acceded to it, that the shareholders pay off the whole of the tutwork and wages account. That account, as you will see, is 2468*l.* It has been lessened since the last time by 1500*l.*—since last time you resolved to wipe off this debt—and also by about 50*l.* which has been received from tributers for old debts, since the last meeting of adventurers. There are, probably, some hundreds of pounds which we may recover in the course of time, but any amounts that may in future be kept from the tributers will be put into the credits with the sales of tin. I am very glad that old account has gone. It has been 80 years accumulating, and has been wiped off in about two years, and that is not very bad after all. I may say that probably the committee might have recommended this a little faster, only we have been laying out money on the mine. During the last 12 months we have put in a 60-in. engine at Harriett's, a new air compressor, and rearranged the pitwork of the mine from top to bottom. I do not think in the 12 months we have laid out less than from 2000*l.* to 3000*l.* in extra costs, and this has been charged in the bills. We were obliged to do that to keep the mine in order, for when the rods and pitwork were originally put down there was no idea, I suppose, that the mine would ever be sunk to a depth of 400 fms. or above. In consequence of the great depth we have attained, the rods have not been big enough, and we were obliged to put in new rods, and new plates and poles from the top of the shaft to the bottom. We have only three rods more to complete the job, and this we shall do during the present week. We have three big oak rods underground, and they will finish for the time our rearrangement of the pitwork. If the price of tin had stayed as at the last account we should have done even better to-day, even by 1000*l.* The price was 52*l.* 15s. per ton then, and few thought tin would go below that. The greater part of the sales has given 50*l.* 7s. 6d.—that is, 2*l.* 7s. 6d. off the last account. I do not mean the average. Perhaps the average is only 10s. or 15s. less per ton than last quarter. The price received has been considerably below the price prevailing last account. The shaft is now down to a sufficient depth to enable us to drive a level 15 fms. below the 375. We have not opened on the lode much yet—only a few feet each side of the shaft. What the whole width of the lode is we have no means of knowing. All we know is that at the 375 we have opened on the lode, which, he might say, was almost a continuous course of tin—for upwards of 160 fathoms in length—(applause)—and wherever we have cut into it we have had it 3 fathoms wide—in some places 4 fathoms wide. We have the lode, taking it probably as 3 fathoms in width for 160 fathoms, standing whole in the 375, and now to be developed at the 388. I calculate in a few months we shall have some hundreds of thousands of pounds worth of tin ground laid open in that bottom level. (Applause.) We have done nothing yet below the 375, except sunk the shaft, and the two winzes. Both these winzes are down at the same depth—9½ fathoms. I hope in three months to hole them to the 388 fathom level. Then we shall have a fine piece of ground laid open there for stoping. The 375, west of sump, is back 35 fathoms, and is still worth 25*l.* per fm. The tin is holding further west in that direction than in any other levels above. Harriett's has not turned out of much value yet. We meet with rich bunches of tin occasionally, but we do not find any very productive ground for any great length. As I have said before, we are not deep enough in that part of the mine to meet with continuous bunches of tin. On the south lode we have had considerable improvement in the 290 west. That is going forward in whole ground, and there is a great quantity of ground in that direction above the 290, on which scarcely anything has been done. The end is valued at 50*l.*, which is rather a low valuation. Sometimes it has been 80*l.* per fathom. There is a very large extent of ground to be opened up on the south lode. The eastern shaft is still being cut down, and skip and ladder roads fixed. That shaft has been sunk 155 fathoms below the surface. We are going on with it regularly with nine men. We could put it down faster by employing more men; but we do not think it worth while as it will be down to meet the ends from this (the western) part of the mine. The prospects of the mine are quite enough, I believe, to satisfy any reasonable man. We are at a great depth, it is true; but we have got better facilities than 20 years ago, and can work cheaper at 400 fathoms now than 30 years ago at a depth of 200 fathoms. (Applause.)

Mr. Edward Heard: I think this is one of the most satisfactory accounts we have had at Dolcoath for very many years. I say so because I believe I speak on behalf of outside shareholders as well as inside shareholders, when we congratulate the committee on wiping off this suspense account. I think it is a source of congratulation that the dividend will be paid out of cash, so that we shall not want to overdraw one penny from the bankers to pay the dividend. I have always advocated that dividends should be paid out of cash instead of borrowed money. I have always advocated that Dolcoath, the richest mine in the county, should not pay dividends out of bankers' charges. I speak this in the presence of a very old friend of mine, one of the best financiers in the kingdon, and I believe, he would advise, the keeping of a reserve account. Bankers must be paid as other merchants, and if we overdraw they must be paid like other people. I sincerely hope we shall not have an overdrawn account at our bankers. Look at the incalculable importance of the mine. We are spending in this neighbourhood 80,000*l.* a year perhaps 50,000*l.* or rather more in the way of labour alone. Who can sufficiently appreciate the importance of this mine? In what would otherwise have been a barren wastrel, employing only a score of hands, every month between 3000*l.* and 4000*l.* in wages alone, notwithstanding that we have to pay rather a high rate in dues. We are paying Mr. Basset 9000*l.* a year in dues, and are yet able to make the very satisfactory profit of 9400*l.* in three months. For one, I beg to congratulate not only the Chairman and the committee, and agents, but the shareholders, one and all, on the favourable report presented to-day. And so far as I have been able to judge, this is the best report ever presented at Dolcoath.

The Chairman: I am very much pleased that we have been enabled to present such a report. It is a very great comfort I think the old mine is just as great as it has ever been. Without almost an exception we have been paying dividends for 30 years. I look upon the mine as great for the future—in the sinking of the shaft in the eastern part, and driving the level at the 375 towards that shaft. It is a very great comfort, not only to ourselves, but also will be, I think, to our children—to those after us—to look upon the mine as a long and substantial mine—a mine to last for many years to come. It has lasted a vast number of years so far, and, I think it will last, as I have said, for many years to come. We stand here, in Dolcoath, in a very fine position. We have a capital lease for 23 or 24 years. The mine is very fine, and looking very well for the future. I think our interest and that of Mr. Basset goes together. Mr. Basset wants a good mine, and a permanent mine, and we want the same. I think we shall please him in working as we do as well as benefit ourselves. I hope that we shall long be spared, many of us, to meet together, and have such a report as we have presented to-day. When we were in difficulties Mr. Michael Henry Williams was so good as to stand by and speak for us, and it is a pleasure to see him this day.

Mr. Williams: Have you had the lease renewed?——Captain Josiah Thomas answered in the affirmative. Until they had the lease for 21 years absolutely they had to have it renewed for a period of two years. It had been renewed for the last period of two years.

Mr. Bailey remarked that Mr. Heard had doubtless given good advice as to having a good balance at the bank, and so save bankers' charges. He thought there were a great number of adventurers—and the smaller ones the more especially—who would like the other side of the question placed before the committee. He thought it was possible to adopt too heroic a remedy in this matter. They had just paid off 4000*l.* on this tutwork account. It was within the knowledge of a great number of shareholders in the mine that a number of persons, widows and others, were dependent almost for their living on the dividends from that mine. He thought the committee should only appropriate a very small sum quarterly towards having a balance at the bank. He thought the majority of the shareholders would be quite content, for a little time, to pay some proportion of bankers' charges, and to place, say, 500*l.* quarterly in the bank so as to get a reserve account. The remainder, he was of opinion, ought to be divided. He did not think the majority of the smaller shareholders would like to see a big balance every quarter placed in the bank, and that sum of money kept out of the dividends. That district, what with agricultural depression, and the calls made upon them, they had been almost denuded of money. Many, unfortunately, have to pay bankers' charges on their account; and if they made a large profit there nearly the whole of it should for a time be divided. He believed this was the opinion of those local shareholders who had had to pay calls.

Mr. Alfred Lanyon was quite certain that Mr. Heard was correct from the commercial view of the thing in contending that an enterprise of that kind should be in such a position as to relieve itself of any banking charges. He to a certain extent—to a great extent, agreed to the remarks of Mr. Bailey that there was a number of adventurers in Dolcoath to whom every 2s. 6d. or 1s. was a matter of importance. He was sure the committee were sufficiently business men to look at this matter. He thought they should have a reserve fund: they should not be behind East Pool. He believed East Pool did not owe one penny in bankers' charges. He was satisfied the committee could devise means so that they would not be second to East Pool. He hoped in a short time they would not have to pay a penny in bankers' charges.

Capt. Josiah Thomas, in response, said the only way to secure this balance was not to divide the whole of the money. In times past the shareholders had wasted everything. The committee had always taken the case of those who wanted money, and on that account the dividends had sometimes been larger than, perhaps, they ought to have been in the true financial position.

Mr. Edward Heard suggested that meeting should pass a resolution in support of the committee just formed to discuss the grievances necessary to be remedied in Cornish mining tenure, and which met for the first time that day, but nothing came of the suggestion, and the proceedings terminated.

LA PLATA MINING AND SMELTING COMPANY (LIMITED).

The second ordinary general meeting of shareholders was held at the City Terminus Hotel, Cannon-street, on Monday,

Mr. John F. Lovering in the chair.

Mr. Henry Richards (the secretary) read the notice convening the meeting. The minutes of the preceding meeting were read and confirmed. The report and accounts were taken as read.

The Chairman formally moved the adoption of the report and accounts.——Mr. George Heiron seconded the motion.

The Chairman said, since they had the pleasure of meeting the shareholders last year a painful circumstance had overtaken the company by the loss of the Chairman. The meeting would have been called at an earlier date, but the directors had waited to see if the Chairman sufficiently recovered to come and present himself in that chair. For his own part, he was exceedingly sorry that Mr. Griffiths was not still with them. However, as death had removed him, the company must go on, and those who were left must do the best they could. Death had also been busy amongst them at the works, their manager, Mr. Coom, having died last May. This had thrown them a good deal out of gear in that part of the country. They had, however, through Mr. Reuben Rickard, appointed a gentleman to take Mr. Coom's place, and matters were now going on so far satisfactorily, as he would explain when he came to the accounts. In taking the balance-sheet, the shareholders would find that the capital of the company was 400,000*l.* This was a figure that was well known to them before the present board was constituted. It would also be remembered that it became necessary to issue 25,000*l.* of debenture bonds before the company could be made an English company. The bonds were offered with 10 per cent. interest and a bonus; they were offered first to the shareholders, who subscribed for 7000*l.*, and the board and their friends subscribed for the balance. Of that amount 10,000*l.* had been paid off, and they now owed 15,000*l.*; to creditors in England, at the 30th June, 2917*l.*; but since that date the drawn bonds and the interest had been paid, and those items had been paid. To sundry merchants and others in America they owed 5955*l.*; bank overdraft, 8315*l.*; and bills payable, 4166*l.*; but these items had since been wiped out and fresh ones incurred. On the credit side of the balance-sheet it would be seen that the capital expenditure account on the mine was $2,000,000, less $100,000 of working capital as they had been led to believe by the old company; but this working capital happened to consist of an inventory of plant and various things out there; there was not a pound in cash among it for

working capital. The smelting works buildings were put down at $65,000; machinery, $18,700; materials, tools, blacksmith's shop, and various other matters, $15,616, making up a total of $99,316 This was the so-called working capital, and, therefore, at the outset the company found itself in difficulties, and, had it not been for the 25,000*l.* sent from this country, they would have had to succumb before they had a fair start. They had, however, by a great deal of care kept themselves above water, and they were alive to-day. Since that period they had had to spend upon real estate for improvement of the works, so as to keep them in workable condition, sundry sums of money amounting to about 11,000*l.* A large number of improvements had been made, which had been paid out of income, as they had not wished to swell up the already over-weighted cost of the works. Their stocks at Leadville consisted of bullion and ore, 26,216*l.*; fuel and flux, 1010*l.*; and supplies, 99*l.*; or altogether, 27,326*l.*; while the debtors out there were over 8000*l.*; so that they had 36,000*l.* or 37,000*l.* of live assets at Leadville, against liabilities of about 21,000*l.* out there. This left them upon the working of the two years a balance of 12,429*l.* to the credit of the profit and loss account. This amount would be divisible among the shareholders if the company were in a position to divide it; but if they divided it the company would be left without working capital. Already 10,000*l.* had been repaid to the debenture-holders, and if another 10,000*l.* were divided it would wipe out the working capital altogether. The directors, therefore, resolved a short time since to offer to the shareholders 10,000*l.* in debentures at 7 per cent., to provide the necessary capital. Of course when the debentures were issued, two years ago, the company was not in the position that it now occupied. There was a large amount of risk to those who found the money. The company was then an American one; now it was English, and it had been worked round into a condition of something like security. Therefore, 7 per cent. will be a very fair interest to pay for the money. It had been suggested that they should pay off the old debentures, and get the money at a less price than had been contracted for, but he need not tell the shareholders that that would be impracticable. The company entered into a contract with gentlemen to lend the money for five years, and they would of course hold the company to its bargain. At all events if the shareholders decided to divide the 12,000*l.* the company would have to borrow 10,000*l.* between this and next month. Passing to the revenue account in Leadville it would be seen that they had done a very large business, but he was sorry to say that the result was about the smallest he had ever seen from so large an amount of business. Of the seven companies that were in existence at Leadville when this company started only four were now at work. This company had spent 344,866*l.* in ores, &c., to produce 356,873*l.*, while the cost of their own mine had been 21,035*l.* to produce 30,762*l.*, leaving altogether a credit balance of 13,935*l.* on a turnover of 387,000*l.* This was as small a result as he had seen for many a day. The Chairman then gave the details of the expenditure at Leadville. They had insisted on the cutting down of every item of expense as far as possible. The amount of 6823*l.* included a bad debt of $1041 of the Merchants' and Mechanics' Bank. The directors had also determined as far as possible to reduce the expenses on the other side. They were obliged, so long as there were any of the old shares in existence, to keep an office for registration in New York, and that had cost them 368*l.* for the year, but he expected that that item would be reduced to about 150*l.* The London office expenses had also been reduced to 550*l.* from July last, and the directors had voluntarily agreed to reduce their fees. (Hear, hear.)

A SHAREHOLDER: By how much?——The CHAIRMAN: By 250*l.* out of 1000*l.* When that reduction was decided upon there were five directors, but as there were now only four no doubt the sum would be further reduced. The shareholders, however, could not expect gentlemen to meet weekly, and sometimes oftener, for two or three hours a day, unless they were paid for their services. (Hear, hear.) They were all men of business, and they had done all they could for the company. They had never pledged its credit, and when a few hundred pounds had been required they had always found it amongst themselves. They had had a very chequered existence. They had had adverse railway freights to contend with, and they had had ores which had contained too small a percentage of lead to enable them to get all the bullion from them, the percentage of lead required being from 16 to 25. They could not tell how much silver they were losing; but they knew they were not getting out all the silver contents of the ore. Then matters were not yet settled with the old company, in connection with what was to have been handed over to this company when the business was bought. The Chairman also referred to the possibility of having to move the smelting works to the valley below—100 miles distant—as the action of the railway companies was most prejudicial to the company. The opposition which they had met with was dying out, and the reputation and credit of the company was at least equal to that of any concern in the place. In conclusion, the Chairman said he would only be too happy to answer to the best of his ability all the questions which might be put. (Cheers.)

Mr. HARDY observed that there was an item of 18,437*l.* due to creditors in America, including an over-draft from the bank, which could not be obtained without paying interest.

The CHAIRMAN: 10 per cent. They do not do anything under that out there.

Mr. T. RICKARD: It is only a temporary loan.

Mr. HARDY said it seemed that as the mine costs were 21,000*l.*, and 30,000*l.* worth of ore was produced, it was worth 9000*l.* a year to them. (No, no.) As to the number of shares, 400,000 was a very unwieldy number, and there was little chance of their rising in value. It would be well if they could be reduced to (say) 100,000.

Mr. STEWARD said the report stated that 11,072*l.* had been spent in the past two years on mine and smelting plant, mine developments, and smelting works improvements; but he could not find any statement of the necessity of that expenditure, or that it had been judiciously made. Then, he had a strong feeling about these 10 per cent. debentures.

Mr. HEIRON pointed out that the item included the interest and bonus for two years.

Mr. STEWARD thought some effort should be made to get the interest reduced.

The CHAIRMAN replied that the directors had tried to get a reduction of the interest; but those who had advanced the money when the company was in the greatest difficulty refused to do so. They said that the company had entered into a contract with them, and it must carry out its bond.

Mr. STEWARD suggested that the directors should further reduce their fees for the present to 500*l.* a year. (Hear, hear.)

Lieut.-Col. A. W. RAY strongly opposed the suggestion that 10,000*l.* should be borrowed at 7 per cent., so that the profit now shown could be divided amongst the shareholders. They had waited so long for a dividend that it would not hurt them much to wait another year, and he trusted that no dividend would now be made. (Hear, hear.) He considered the expenses of management both at Leadville and in London very heavy. The Leadville expenses were 6823*l.*, and it seemed to him that the directors in London could not have a great deal to do. He was the last man in the world to underpay those who worked for a company, but while the shareholders were receiving nothing he thought the directors should reduce their fees still further. The office expenses amounted to 750*l.*, but he knew of many mining companies which, taken with other companies, were provided with all the accommodation they required in London for about 100*l.* a year. (Hear, hear.) He did not blame the directors for the position of the company. It was due to the fact that the property was handed over under false pretences, and that it was a fraud from the beginning. All they could do was to cut down the expenses in all directions, both at home and abroad. (Cheers.)

Mr. WILLIAM ABBOTT said that, considering the great disappointment this company had been to the London shareholders, he thought the tone of moderation adopted by those interested in the company was to be greatly commended. When great difficulties had to be overcome it was always unwise to indulge in heated language, but the directors would see that the shareholders were as one with them in the desire to do the best they could to make this a dividend-paying concern. The remarks which had been made as to the necessity of reducing the expenses would no doubt have their effect on the board and on the management. He had generally found that "sweet are the lessons of adversity," and they had plenty of adversity in this concern. (Hear, hear.) As to the interest on the debentures Mr. Steward must remember that the debentures were raised at a time of exceptional difficulty. In fact if the 25,000*l.* had not been raised the shareholders would have lost hold of the property, and that being so it was only fair that the men who at great risk came into the gap should receive the full measure for which they had agreed. (Cheers.) The position of the company was now very different. Its credit had been greatly improved, and it was making profits. It would he thought be unwise to borrow money as working capital, so that the profits clearly made should be divided, but he suggested whether it would not be practicable to issue dividend warrants for, say, 6d. per share, and exchange those warrants afterwards for debentures. (Hear, hear.) This had been done in another company with which he was connected, and he did not see why it should not be possible in this company. The profit of 12,000*l.* had clearly been made, and it undoubtedly belonged to the shareholders; but it could then be retained as working capital. The present shareholders were, however, entitled to the profit made in some shape or other. It mattered very little, perhaps, to the large holders, but a payment, either in cash or in debentures, would show a certain amount of life in the company, to which up to the present time the proprietors had been strangers. (Cheers.) As to the moving of the smelting works down to the valley because of the action of the railway companies, he hoped that suggestion would not be carried out, for if it was the railway companies would probably combine to make smelting profitable at Leadville and unprofitable in the valley. (Laughter.) As soon as they had crushed out, or "frozen" out, enterprise in one place, their policy seemed to be to develope it in another. He, therefore, thought it would be unwise to go to the expense of altering the smelting works, where fresh combinations might be ready to meet them. (Hear, hear.) With only 12,000*l.* at the credit of the company it was no time to experiment or play tricks with their resources or their plant by making any movement whatever. (Hear, hear.) Seeing that the times were so exceptionally bad, he thought it was the wrong time to make experiments, more particularly as, bad as the times were, they had made a profit of 10 per cent. on the present value of the shares in the market. He saw no reason for despair; but, on the contrary, there was every reason to look hopefully to the future. (Cheers.)

Mr. G. HOWARD cordially agreed with all that Mr. Abbott had said.

A SHAREHOLDER suggested that four directors would be sufficient for the present.

The CHAIRMAN said there was no intention of increasing the number of directors beyond four. In reply to the other questions he said that the rise in the amount of bullion obtained lately was due to the increased richness of the ore. The ores raised from their own mine had given them something over 30 per cent. profit. As to the liabilities these were constantly being incurred, and as constantly paid off. Of course they could not stop the works so as to make a clear balance-sheet. (Hear, hear.) The directors would still further reduce their fees, and they would only take 500*l.* for the next year. (Cheers.) They would carefully consider Mr. Abbott's remarks; and he thought it would be better to let the question of raising fresh debentures drop. The money subscribed for on these debentures would, therefore, be returned. (Cheers.)

Mr. THOMAS RICKARD, in reply to a question, said the average yield for the first six months was about $5000 a month, but in the last six months that amount had been more than trebled. They had done their utmost to cut down the expenses in every direction. They were now working on a second floor 150 feet below the first floor, and that ore was of twice the value that it used to be in silver and, it contained some gold. They hoped during the current year to have something very valuable in the Gnesen location. As to the London expenses they had already voluntarily made some considerable reductions. This firm was the first to come into the breach and they had provided a fourth of the whole amount required to save the concern, so that the shareholders had a pretty good proof of their sincerity in connection with the company. It must be remembered that this was not an ordinary mining company. They had over 2000 shareholders and bondholders. They had fallen upon bad times, but he believed the company would yet do well. There was no intention of removing the smelting works if it could be helped, but they must be prepared for any contingency. (Cheers.)

The CHAIRMAN added that in any case the shareholders would be called together before any such step was decided upon. (Hear, hear.)——The motion was then put and carried unanimously.

Mr. EMDEN proposed the re-election of Mr. James Harris, F.C.A., as auditor.

Mr. BROOKS seconded the proposition, which was adopted.

On the motion of Lieut-Col. RAY, seconded by Mr. G. HOWARD, a vote of thanks was passed to the Chairman and directors, and the meeting then terminated.

THE ECTON COMPANY.

The second annual ordinary general meeting of shareholders was held at the City Terminus Hotel, Cannon-street, on Monday,

Mr. JAMES JUDD, C.C., J.P., in the chair.

The notice convening the meeting having been read the reports of the directors and manager and the statement of accounts were taken as read. It was stated that the proxies received in favour of the Chairman represented 15,282 shares.

The CHAIRMAN said these annual gatherings were exceedingly interesting and very valuable, not so much because of what the directors had to tell the shareholders, as because of the opinions which were elicited from the shareholder themselves. It was the custom of the board to convey to the shareholders the utmost information from month to month, and it was also their custom to give an annual *resumé* of those reports so that they were prevented from having anything very novel to tell the shareholders on these occasions, but they could testify from past experience that the results of these meetings were very valuable so far as the company was concerned. He might congratulate the shareholders in reference to the evident improvement in commercial affairs. Most of those present, at all events those who where interested in financial affairs, had probably seen the encouraging money article which appeared in that day's *Times*. The view taken was not an optimist one, indeed it was rather pessimistic, but it showed that there was an undoubted movement upwards in affairs generally. The imports were improving, and the important fact of an improvement in shipping was apparent. Such a change must benefit those who had stocks of metal to dispose of. He wished he could say that the unquestioned hardening in iron was also to be seen in reference to copper, but it was a great satisfaction to them to know that their mines were not wholly copper mines. They were of course, largely copper producing, but they also contained lead, and blende in almost illimitable quantities. At the time when the property was previously worked, blende was not an article the manipulation and uses of which were known. They had, therefore, found that immense quantities of this metal had been left as a valueless product by those who had gone before them, and they had thousands of tons of blende which could be sent to market, and he was speaking on the authority of a gentleman whose opinion he never doubted upon such matters—at a profit of at least 1*l.* per ton, while some of it would reach a much higher price. Having now had considerable experience of his friend Mr. Bowman, the managing director, whose experience was greater than any of the directors he had found from his character and his great carefulness that if Mr. Bowman told them the value of an article was 1*l.* per ton to them they might safely look for 25*s.* At all events they might be quite certain that Mr. Bowman would not exaggerate anything or raise hopes which were not likely to be realised. (Cheers.) At the last meeting there was an unquestionable expression of opinion that the directors should spend more money in developing the Clayton mine. That opinion was iscussed then, and it was subsequently discussed by the board, who in the result proceeded to carry out th wishes then expressed. If they looked at the cash statement they would see that the development had been carried on fully upon the lines suggested by the shareholders at the last annual meeting. Up to that time the expenditure had amounted to something like 4500*l.*, and it had been divided into about equal parts of about half in machinery and half in labour. The machinery had been bought on exceptionally low terms, and it was stated at the last meeting that thenceforward more money could be spent on the development of the mine than on the purchase of machinery, and up to the termination of the past year that policy had been carried out most completely. For instance, the labour alone had amounted to 3084*l.* against a very much less amount—about 2000*l.*—in the previous year. Since the closing of the accounts a considerable amount of dressing machinery had been purchased, and was now in process of erection. The machinery was efficient for the purpose of getting to the market the blende which they had in very large quantities, and it was hoped that by the end of November this machinery would be in full working condition. They had been somewhat delayed by the condition of the weather and so on, but these were matters which invariably occurred in connection with mining, and they must not be surprised that this company was not exceptional in regard to them. The next accounts would show that they had somewhat altered their position, and that they had been spending a good deal of money in the purchase of the necessary machinery. Some months ago they had a very interesting meeting at the mines, when a number of gentlemen interested in the company, and having especial mining knowledge, met at the mine and discussed various matters, and with a single exception the meeting agreed to the further issue of shares. It was also felt that the shares should be offered to the existing shareholders *pro rata*, and that course had been adopted. Between 13,000 and 14,000 of the 25,000 shares offered to the shareholders were taken up, and since that time he was exceedingly pleased to say that the whole of the shares had been absorbed. (Cheers.) They were, therefore, in a position of being able in due course to apply for a settlement on the Stock Exchange, and to put the shareholders in the position of having the market which exists brought to their doors. This was exceedingly satisfactory, because without any trouble or sacrifice at all the whole of the shares had been absorbed, and the money could be had whenever it was wanted for the development of the property. At first it would be remembered they had to go on tentatively, trying various parts of the series of mines to a small extent; but now, having 30,000*l.* at their disposal, they would have no hesitation whatever in going on energetically. From the 110 to the 145 fathom levels they had indications which warranted them devoting themselves thoroughly and completely to the work that was there to be done. As the mine had been unwatered the value of the ore discovered had increased exactly in the ratio of their descent, and assuming that something similar could be looked for as they proceeded still lower, there could be little doubt that there were greater riches below than those which had been discovered above. (Cheers.) The directors were fully alive to their own personal duty. They had increased their holdings exactly as they had asked the other shareholders to increase theirs, and they had also taken a great many of the shares which were not applied for by the general body of the shareholders, showing at least their belief personally in the valuable character which they directed under the guidance of the shareholders. (Hear, hear.) They would continue to do their utmost to develope the property, and they were more than ever encouraged by the belief that all would be well, because in no one part had they met with any absolute disappointment. He thought they were justified in asking the confidence of the shareholders not only for the way in which the affairs of the company had been conducted, but also because their opinions had been so largely justified by the results. (Cheers,). He then moved the adoption of the reports and balance-sheet.

Mr. JEFFERY seconded the motion.

Mr. HAMPSON: Do you anticipate any greater difficulty with pumping the water than those you have already surmounted?——The CHAIRMAN: At the 155 fm. level the water increased about 2 ft. a day, but that we are enabled to clear in about an hour or an hour and a half, so that if the water increased 9 ft. a day we should be able to clear it out; but there is no possibility, or at all events probability, of such a thing occurring. In Cornwall, as you are aware, the cost of pumping is very large, amounting to as much as 300*l.* or 400*l.* a month for coal and labour for unwatering mines not so valuable as these.

Mr. HAMPSON: We are coming upon winter time, and I should like to ask whether it is likely that the stress of weather will prevent you dealing with the blende that you wish to send to market, and are the buildings so situated that the weather will not interfere with your operations?——Mr. WILLIAM BOWMAN (the local director): As to the pumping you who have seen the mine will be aware that our adit level takes the water 600 ft, below the top of the hill, and before unwatering the engine-shaft we took all the water we could get from above instead of letting it get into the mine. The shaft is perfectly dry. What little water gets down is taken off in an inch pipe at the 30, and the little thermal water we get out in about an hour's pumping a day. As to the weather interfering with our dressing sometimes storms may prevent us dressing for a month or two, but we are doing all we can in the way of covering the picking-tables and so on, to enable us to go on dressing through the winter. The Chairman has alluded to the value of the ore. Of course that is more or less guess work, but I hope that the blende and copper ore in the Clayton Mine will yield fully 1*l.* a ton profit. I believe we shall not have much difficulty in separating them. We may have to change the machinery a little, but I apprehend no real difficulty. Our veinstuff is light. Its specific gravity is about 2·55, whereas the blende is 3·87. Our copper in Clayton is a little more than that, but 3·41 is the average of my trials. It contains a little less iron than some copper, and there is just enough margin for our machinery to work fairly. I never saw such good blende as ours except at Minera. Its specific gravity will be close up to 4-3·87. Our prospects at the present moment at the bottom of Clayton are better than I ever expected. I do think we have yet cut the Clayton pipe, though some think we have. I believe it lies nearly 20 fms. to the north of us. But we have a very good branch of ore in the cross-course—ore that was not valuable to the former workers, but which is valuable to us. We have a large amount of ore in reserve, and the more we work the larger it becomes; there is no end to it. We have extended 20 fms. on it, and I find it very encouraging. Although we may have to wait for large plums we have something substantial to work upon, even if we never find the Clayton pipe; but if we do, the character of the ground we are entering now in the bottom of the Clayton is so far superior to anything above I feel confident as a shareholder that we shall have a large course of ore. If we cut the Clayton pipe I am sure it will be much better than it has been above. The character of the rock is just like what we should like to see. I say "we" because I speak on the authority of miners of the district who know the country well. (Cheers.)

The CHAIRMAN pointed out that in the year they had driven 182 fathoms, and they had sunk 26 fathoms. That was perceptible and positive work, from which great results had already been achieved; at all events, in the way of blende.

Mr. SOWERBY, C.E., F.G.S., said he had not visited the mines since the last meeting; but he did not attach any very great importance to that, because the company had in Mr. Bowman, who was probably more competent of giving an opinion of the property than any other mining engineer, however competent he might pretend to be. At the date of the last meeting he (the speaker) had rather anticipated that the mine would have been unwatered rather more rapidly, and that some ore would have been taken from the higher levels; but Mr. Bowman had evidently directed his attention to the complete unwatering of the Clayton Mine, and this was undoubtedly a judicious and wise course, for to have worked in the upper strata with a lot of water below might have led to serious difficulties and accidents. But, after all, the length of time occupied in the unwatering process had not been very great. He had read Mr. Collingwood Kitto's very interesting report, which almost entirely confirmed what had previously been said. The directors' report referred to the projected unwatering of the Ecton Mine. That would no doubt be

a stupendous work, for there was a great reservoir of water; but it would probably be better to unwater the mine at once than to work round the water with the chance of the workings being flooded. The formation of the Ecton Mine was partly aqueous and partly igneous, and there was little doubt it had been formed under the sea. The pipes of copper seemed to come up in a sort of basin formation, getting narrower and poorer towards the surface; but whether the great Clayton pipe had been a central cone down which the other cones had been studded was a question which time alone would prove. The formation of the Rio Tinto Mine was of a similar character, differing materially from most other copper mines. As to the price of copper he thought the time was coming when there would be a much greater demand for copper for the original purpose for which it was used—for covering ships. Naval men were only now beginning to discover that the best way of preserving the hulls of ships was to cover the iron with wood, and then to sheathe the wood with copper. The German Government had recently covered one of their vessels in this way, and there was every reason to believe that the practice would be adopted here. He considered the position of the company thoroughly sound, and he believed with Mr. Bowman that the mines would increase in value as they got lower down. (Cheers.) Mr. Sowerby added that he was not a shareholder in this or any other mine, as he considered it best, as an expert, to be perfectly independent.

Mr. Urwick said he believed they would find a very large amount of blende in the Ecton Mine. Of course, it had been wise to commence working where they knew that they could easily obtain returns. This was the reason they had commenced with the Clayton Mine, where they had come down upon a body of ore, blende mixed with copper; in fact the blende almost seemed to be the containing rock of the pure copper. Their anticipations had been more than verified. They were driving at the 144 fathom level in a body of blende mixed with copper. They had it in the roof and sole, in the sides and in all the ends, and they had driven on it for 20 fathoms. They were driving towards where Mr. Bowman believed they would find the Clayton pipe, but all the driving was in paying ore. The directors had determined to unwater the Ecton Mine, feeling convinced that what had been found in the Clayton would also be found in greater abundance in the Ecton. When the Ecton was worked 100 years ago blende was of no value, so that when it was unwatered they might hope to find a large body of blende. The unwatering would probably be accomplished in from 15 to 18 months, and the cost was estimated at 3000*l.*, and it was believed that every penny of that amount would be paid by what they found there ready to bring to the dressing-floors, which he hoped would be in operation by the first week in November.

The Chairman said they had been anxious to get all the independent opinions they could obtain from the best authorities such as Mr. Sowerby and Mr. Collingwood Kitto, and all the opinions had been in the same direction. A large shareholder had directed Capt. Nance to report upon the property, and he had been good enough to send the report to the board. If the shareholders wished it, this document should be read. (Hear, hear.)

Mr. Ross then read Capt. Nance's report, which gave the details of the workings and the prospects of the various points, which the writer considered very good indeed.

The Chairman had no doubt that other uses would be found for copper, especially in the direction mentioned by Mr. Sowerby. The very fact of its cheapness would induce people to use it for purposes to which it had not been hitherto devoted.

The motion was then put, and carried unanimously.

The Chairman proposed the re-election of Mr. George Ross, the retiring director, remarking that Mr. Ross was indefatigable in his exertions on behalf of the company.——Mr. Hampson seconded the proposition, which was adopted, and Mr. Ross briefly returned thanks.

Mr. Molyneux proposed the re-election of the auditors, Messrs. W. H. Pannell and Co.——A Shareholder seconded the proposition, which was agreed to.

The Chairman proposed a vote of thanks to Mr. Bowman for his excellent management.——Mr. Bowman seconded, and the proposition was carried.

Mr. Bowman, in acknowledging the compliment, took the opportunity of thanking those engineers who had visited the property, for the spirit in which they had done so, and for the services they had rendered to the company.

Capt. Nance, in reply to Mr. Ross, said he was very well satisfied with what he saw.

On the motion of Mr. Jeffery, seconded by Mr. Bedford, a vote of thanks was passed to the Chairman and directors, and the meeting then closed.

THE TRANSVAAL GOLD EXPLORATION AND LAND COMPANY (LIMITED).

The statutory general meeting of shareholders was held at the Cannon-street Hotel, on October 7,

Mr. S. Crowder in the chair.

Mr. C. H. Burnand (the secretary), read the notice calling the meeting.

The Chairman said he regretted to have to inform the shareholders that the Chairman of the company, Mr. Farmer, was prevented by illness in his family from being present. He could have wished that Mr. Magniac had filled the position of Chairman to-day, as that gentleman had filled the chair from the commencement of the company. This was a statutory meeting, and under ordinary circumstances merely formal matters would be transacted, but under the existing circumstances of the company the board were of opinion that it would be best to lay before the shareholders a few facts connected with the present position of the company, in order that they might form their own conclusion as to what that position actually was. They would remember that at the last general meeting of the company three gentlemen were appointed by the shareholders and four by the former directors, who were to sign the Articles of Association of the company, and then to elect the directors. On May 16th the seven gentlemen met and signed the Articles of Association, and on May 21st, after some little difficulty and discussion the present board were elected. On June 8th the company was registered, and he might say that, individually and collectively as a board, they assumed that then all difficulties were at an end, and that they would at once obtain possession of the assets and liabilities of the company, and be able to go to work. But in consequence of the action of a section of the shareholders (acting perfectly within their right) some delay took place; those gentlemen intimated that they were bringing an action against some of the gentlemen who were connected with the former company, and served a notice upon the liquidators to the effect that should they transfer the assets of the old company to the new before the termination of that action they would hold the liquidators personally liable, and he need hardly say that, on the intimation, the liquidators took counsel's opinion, and declined to transfer the assets and affairs of the old company to the new. The new company was formed on May 21st. Individually and collectively the members of the board worried the liquidators, and tried to get the assets transferred. The liquidators were willing, but had it not in their power to transfer the assets, &c., until July 15th, when the transfer was made. Immediately the present board came into power, and into possession, they went into all matters affecting the company's position, and he would explain to the shareholders two or three things which the directors found. They found a claim by Messrs. Matheson for 3450*l.* against the company: 1200*l.* of that amount is in the statement which was laid before the shareholders on the 31st December, and the remainder of that amount was for moneys advanced by Messrs. Matheson to carry on the business from the end of December until the time the directors took possession, when there was nearly 1000*l.* lying at the mine, which was part of their money, and there was also gold which had been purchased. The directors were in this difficulty; they feared that any part of the call of 6d. per share would go for the payment of the claims of the old company, but they were resolved that that 6d. per share should be used absolutely and entirely for the working of the new company and prospecting the property. That occasioned some little delay; but Messrs. Matheson, as in all their transactions, had behaved in the most liberal manner, and, by postponing their claim, had enabled the directors to proceed with the work of the company. (Hear, hear.) On August 6th the board felt themselves in a position (after making arrangements for the old claims), to make the call according to the resolution of the previous meeting. The result of that call had been satisfactory; up to the present time, including the 15,000 shares which would be taken up in Cape Town, there had been 211,258 shares applied for out of the 250,000 shares, and no doubt the balance was represented by persons away from England, and therefore had not received the notice. But with this small percentage the capital had been entirely subscribed. Since the directors went into the accounts they found there was a sum of 1500*l.* in regard to which this company had a claim against a mortgage company; but seeing that this matter might possibly become the subject of law proceedings, it was not desirable to enter into greater details concerning it at the present meeting. The directors had no doubt that they had a just claim upon the mortgage company for the 1500*l.*, and also for 125*l.* for interest, and he looked upon that amount as a real and good asset of the company. Up to the present time the directors had not been able to get the final accounts from the liquidators, but he hoped to do so in a few days. The directors went into the position which Mr. Williams occupied with regard to the company. Mr. Williams was engaged for the unsuccessful company at a salary of 3000*l.* a year. When the directors went into the matter they were met with an offer from Mr. Williams, which was made in the most honourable manner, who, finding that he could not succeed as he wished, and that the results did not warrant the payment of such a salary, tendered a compromise to the board, by which the company saved 1000*l.* or more. (Hear, hear.) The shareholders would be anxious to know what was Mr. Williams' opinion of the property, and also what was the board's opinion drawn from Mr. Williams' report and from collateral data. The conclusion which he (the Chairman) had drawn was that there were no less than five sources of gold on the property. The first consisted of a horizontal vein. To realise what that horizontal vein meant they must also realise that at one time in the Transvaal there was a golden age, for the gold had extended over hundreds of square miles of country, but the only record now was on the tops of the highest hills. That horizontal vein stretched over the country. Then came the eruptive rock, which broke the horizontal vein, and threw it up at all angles. Then came the period of denudation, which did away with that form, and left patches on the tops of the hills. In that horizontal vein there was nothing found but the finest possible flour gold; there had never been nuggets or rough gold found in that vein. That vein had been of water origin, and consequently there must be a matrix from which the gold washed into. Of that matrix there was no record; he found no record anywhere as to where the gold came from which formed that horizontal vein. In the lower ground they found rough gold in the diorite, and of course that had a different origin. Mr. Williams gave his opinion that the origin of that was that it had fallen from the disintegration of the small veins, which was certainly a very probable and very plausible solution of the question. But the difficulty arose that they had not yet found any gold in the diorite which carried the source of the gold, and, therefore, the origin was not clearly defined and settled. Then there was the reef of quartz on the top of the Columbian Hill, and with regard to this Mr. Williams said there was a large vein of quartz 4 ft. thick, and a considerable amount of coarse gold was taken from this hill, the result of the disintegration of the quartz vein, but a shaft sunk 50 ft. only gave 2 dwts. to a ton. Then they came to the farm Lidovine, which they were not working upon, where they had found boulders containing 1 oz. to the ton. When Mr. Williams left this country he thought he was going to an already productive mine, and that it was his duty simply to set the machinery in motion and get the gold. He did not go there as a prospector, and would not be justified in following up such small indications as 2 dwts. to the ton. There was no doubt there was gold on the property, but there was not so much as was anticipated—at any rate, they had not found it. Nevertheless, from January to March they had 19 diggers at work, and they got 770*l.* worth, and from April to June they got 875*l.* worth. That showed there was gold on the property, and that it was not a barren property; but whether there did exist on the property a rich formation from which the gold came he could not tell. But he wanted to show that they had not a formation on which there was no gold, as had been stated by some people. So much for the past. He would state what had been done to develope the property. At the present time they had a manager there—a gentleman who had been sent out as an accountant. Perhaps it might be thought that gentleman was not able to manage a mine; but there were some people who were able to rise to a position, and such was the case with this gentleman, and the directors had every reason to believe he was a competent man in the position in which he had been placed. Then they had, as amalgamator, a gentleman who was a practical miner, and Mr. Williams stated he believed him to be not only a practical miner, but also a trustworthy man, and from their own experience they knew that these two qualifications were not always united. They had also provided for a weak point in the former management there; there was no one out there until Mr. Williams arrived who was able definitely to say if a mineral was found what it was, or the value of it, or how it was to be worked. There was ore found there which carried bismuth worth 40*l.* per ton, and that was passed through the mill, and went into tailings, because there was no analyst to say that it was bismuth. The present board had taken precautions against such a thing occurring again, and had engaged the services of a gentleman in every way qualified to deal with all these matters, and he was provided with an analytical and chemical apparatus, by which he would be able to make analyses of the minerals. He was also provided with a photographic apparatus, so as to be able to send home from time to time views of the progress which was made in the buildings, and so on. The directors had also provided for 30 miners to go on the property; the company would provide them with food, and if they made discoveries the company would reap the advantage. They had also provided, for the independent working of the company, two Englishmen and 20 natives, who would take up with any prospecting work they might deem advisable. He would give two or three facts with regard to the relations of the company with the Transvaal Government. The company had paid 9000*l.* to the Transvaal Government for transfer dues and concessions, &c., and when it was proposed to re-register the company the Transvaal Government said that the company must pay fresh transfer dues. On the whole, there was a good deal of rough justice in the Transvaal Government, and he hoped the company would not have to pay anything further for the concession. He would give them briefly the financial position of the company; but as the accounts were not made up to date he would pledge himself to 50*l.* He wished the shareholders to understand that there was no idea of any financial difficulties; if they did not find sixpennyworth of gold they could go on for another year, and afterwards, by paying the other 6d. per share, they could go on another year, even supposing they found no gold; but he was happy to say that, by last week's report, one set of men had found enough to pay their wages. (Hear, hear.) The liabilities due by the old company were 3783*l.*, and the estimate for work and London expenses for the coming year was 4380*l.* To pay this they had the call on 211,158 shares—5278*l.*, leaving to be received 920*l.* The cash now in the bank was 4135*l.*, and the cash at the mine 941*l.*, gold in London 450*l.*, paid on account of estimates 4380*l.*, salaries, stores, &c., 328*l.*, making a total of 6775*l.*, and leaving 1388*l.* Then they had the claim on the mortgage company of 1500*l.*, with interest 125*l.* The actual revenue from the property from the 1st January to the 5th May was 442*l.* Therefore, on the whole, they had 2125*l.* to pay 1388*l.* Then they had 35,395*l.* in mills, and the stores cost 7085*l.* He mentioned these facts to show that there was a good margin to work upon. He hoped the rent would be increased, as the directors had given orders to the manager to get Kaffirs to go upon the place, so they would have some reliable labour upon the property. The former board had entered upon the business with flags flying; the present board had entered upon it as a forlorn hope, but forlorn hopes had often led to success, and in this case, if the board did not achieve success the best they could do was to deserve it. (Cheers.)

The Rev. Alan Swinton asked some questions as to the details of working.

The Chairman, in reply, said it was impossible to tell the monthly cost at present. At present the only man on the mine who did not dig was the manager. The amalgamator had not arrived, and the assayer had been prospecting with four Kaffirs. According to the reports all the machinery was intact, and the directors had given orders that it should be kept in perfect order, so that in 12 hours' notice it could be set going. No diggers had taken up claims to search for reef, but there were 14 men at present digging in the tunnel. The depth it had been sunk did not exceed 97 to 100 ft., but the directors had given orders to sink 100 ft. on the vein, which was 4 feet wide, and, if there was any encouragement, orders would be given to sink another 100 ft. They had given orders to sink where the bismuth was found, and also where the small stringers showed in the diorite. The cost of the production of the gold it was impossible to answer. As regarded hydraulicing, Mr. Donoghue reported that some hill was worth 3s. 6d. per cubic yard, but Mr. Williams tried the hydraulic system, and washed away hundreds of tons, which a surveyor had previously stated were worth millions of money, but from which Mr Williams had never got any gold.

The Chairman, replying to a further remark, said that Mr. Benjamin acted *bona fide* from beginning to end, and the roguery did not arise with him. He (the Chairman) thought he could "spot" the man, but as the man had gone over to the majority he would not say any more about it. There had been 12,000*l.* worth of gold sold by the company since it started. It came out as nearly as possible ½ oz. to 1 ton.

Mr. Birt asked the name of the mortgage company which the Chairman had referred to?——The Chairman said it was the South African Land Mortgage Company. If that company did not pay the directors of this company were going to law, believing they had a good claim. It was a question of evidence.

A vote of thanks was then passed to the Chairman and directors, and the proceedings terminated.

GREAT LAXEY MINING COMPANY (LIMITED).

The annual general meeting of shareholders in this company was held in St. James's Hall, Douglas, Isle of Man, on Wednesday. There were present—Mr. G. W. Dumbell (Chairman of directors), Major J. Spittall, H.K.; Captain R. Penketh, H.K.; Mr Frederic Broadbent, and Colonel P. P. Mosley, directors; Mr J. D. Rogers, secretary; the managers, Captains F. Reddicliffe, and W. H. Rowe; and of the general body of the shareholders—Messrs. G. Barber, F. Falkner, A. Caley, W. Tupper, E. Rydings, &c.

The notice convening the meeting having been read, the following report of the managers and the balance-sheet, were taken as read:—

Managers' Report.

Great Laxey Mines, 25th September.

To the Directors—Gentlemen: We beg to hand you our report of the past half-year's work. At the time of the last general report, a short cross-cut was being driven from the east to the west division of the lode at the 271, north of Welsh shaft, which proved to be 5 fms., and since that the driving has been conducted upon the western, or main branch, for 11 fms., the lode producing only stones of ore occasionally, except in the last 9 ft. or so, which has been worth from 6*l.* to 8*l.* per fathom, which is also the value of the present end. The 259 north has been continued northward 15 fms., the lode being almost unproductive for the entire distance. A cross-cut to the east branch is now being made, which part of the lode we hope will be found to contain ore. The cross-cut is already driven 6 fms., but three more may be necessary; and as it is desirable to take up this driving with more vigour we are now placing a rock-drill there. A winze sinking in this level, in advance of the end below, is worth 8*l.* per fathom. The 247 north has been driven 37 fms., and holed to Dumbell's shaft. In this distance there were several short pieces of ore ground of low value passed through, in the aggregate about 15 fathoms, of an average value of 8*l.* per fathom. There is a new winze sinking in this level of the value of 10*l.* per fathom. At present there is but one stope in this level, in the roof, which is worth 10*l.* per fathom. The 235 south has advanced in six months 24 fathoms, the lode for the most part being in an unsettled and disturbed state, and without ore until within the last few days, during which a change has taken place, a little blende ore coming in along with a stronger lode. As this end is now getting into the line of the copper ground we hope for an early good improvement. The stope in the sole of the 220 north is worth 20*l.* per fathom. A trial rise in the 200 south is worth 12*l.* per fathom. Two workings in the 165 south and below it have been worth 8*l.* to 10*l.* per fathom, but they are not now so good; at present value 6*l.* per fathom. Being, however, somewhat of an exploratory nature we hope they may again improve. A roof stope in the 145 north is worth 10*l.* per fathom. A joint rise and stope 18*l.* per fathom, and a stope in the roof of the 130 fm. level 10*l.* per fathom. The sinking of Dumbell's shaft has been completed to the 255, being 10½ fathoms in the half-year; and a cross-cut 2½ fathoms driven to the lode, to which point (as already stated) the 247 in the deep mine has been driven, and a communication effected. The 255 fm. level north is now continued north of Dumbell's as the 255, which depth it is at this shaft; the lode is poor at present. During the six months the 243 fm. level north has advanced 42 fms.; the lode for the great part of this distance has contained very little ore, about 10 or 12 fathoms, averaged in value 6*l.* per fathom. Although the present end is no better, we may reasonably expect, judging from the level above, that it will soon materially improve. There is at present but one stope in this level, in the roof, worth 8*l.* per fathom, the others being worked out. In the 230 north, where the level has been driven 34 fathoms, the first 5 fathoms contained ore worth 8*l.* per fathom, then a stretch of poor ground intervened: the last 10 fathoms have again contained ore, beginning with 18*l.* per fathom, is now worth 35*l.* per fathom, averaging 20*l.* per fathom. A winze, 7 fathoms deep, sinking in this level a little in advance of the end below, is worth from 12*l.* to 15*l.* per fm. A stope in the sole of this level is worth 12*l.* per fm. The two roof stopes are worth respectively 10*l.* and 20*l.* per fathom, and a joint rise and stope 25*l.* per fathom. The 215 north has been further extended during the half-year 44½ fathoms, nearly the whole of which has been in good ore, varying in value from 25*l.* to 40*l.* per fm., of an average value of 30*l.* per fathom. It seems, however, that the present end has reached the limit of the best of this course of ore, the lode having become much smaller and comparatively poor, though still well defined and regular, and may also soon open into another bunch. A communication has been effected between the winze in this level and the rise below, making available a section of ground for stoping and creating a good current of air through the levels. There is one stope in the sole of this level and another in roof, the former having fallen off in value of late, is worth 10*l.* per fathom, the latter 16*l.* per fathom. We have recently resumed the driving of the 200 end north. To start with it contained some ore, but at once improved to 20*l.* and 30*l.* per fm., which continued for about 8 fms., where the lode became disturbed by slide joints, and for the last 5 fms. has been irregular and of small value. This end is now about 15 fathoms from being over the commencement of the bunch in the 215, and what we hope will be a good lasting course of ore at this level also. There are three stopes in the roof of this level of the respective values of 12*l.*, 18*l.*, and 20*l.* per fathom. In the 185 north there are two roof workings in the form of a joint rise and stope in each case, the one worth 10*l.*, the other 18*l.* per fathom. After sinking a winze near the end of this level, which is necessary and will shortly be commenced, we shall resume the driving of this level north. A winze has just been started in the 170 north which is worth 12*l.* per fathom, and in the roof there is a joint rise and stope, the value of which is 18*l.* per fathom. The cross-cut driving east in the end of the 85 north has been further driven 26 fms., making in all 32 fms. In about two months we shall reach the point where the branch ought to be found—that is, supposing it has kept the same underlie as is indicated where seen at the adit and

surface. There are two stopes in the roof of this level as for some time past, but they do not yield the same amount of ore, which is now about 15*l.* per fathom each. The lode in the 60 rise north became poor soon after our last report, and rising was suspended until the 37 fm. level had passed through this run of ground. Our operations at this—the 60 fm. level—have since been confined to stoping in the south end of the rise, the value ranging from 10*l.* to 20*l.* per fathom; now worth 20*l.* per fathom. The ore in the 37 end north at the time of our last report did not continue, and the 32 fathoms since driven have laid open nothing of value until about a week ago, when ore again made its appearance to the value of about 12*l.* per fathom, and the present value is 10*l.* per fathom. It will be gathered from the report of the distances driven in the various levels that the total for the six months amounts to no less than 285 fathoms, which we think in itself is sufficient evidence that there is no relaxing in the vigorous development of the mine; and if results have not been so good as could be desired, still it is gratifying that some good ore has been opened up, adding materially to the resources of the mine. We are pleased to say that all the machinery and plant of every description is in thorough repair and good working condition, and everything possible is being done to maintain the permanent value of the property.—F. REDDICLIFFE, W. H. ROWE.

The following is the directors' report:—

Douglas, October 14.—The directors meet their fellow-shareholders to-day with a considerable amount of satisfaction. This satisfaction would have been much greater had there been any material improvement in the metal market during the past half-year. The price of lead did improve somewhat, but the benefit derived from this circumstance was counterbalanced by a depreciation in the value of spelter. Bearing these facts in mind, the directors are of opinion that the balance-sheet and statement of accounts made up to 1st of August last, and furnished to the shareholders some time since, should not only be a satisfactory but a gratifying result. The debit balance of 2938*l.* 16s. with which the half-year commenced has been wiped out, and a dividend of 3750*l.* has been paid, and a credit balance of 254*l.* 10s. 1d. carried forward to the current half-year: 100 tons of lead, 300 tons of blende, and 200 tons of copper have been sold in excess of the quantity of ore sold during the previous half-year, which, of course, greatly increases the returns. Upon the other hand, there has been a considerable saving in the expenditure; while this saving is mainly effected by a careful working of the mine, it is not made at the cost or sacrifice of complete efficiency in any particular. Nearly 300 fathoms of ground have been driven in the various levels during the half-year just past. The one fact alone should be sufficient to convince the shareholders and the Crown that no effort or reasonable expense is being spared in the vigorous development of Great Laxey Mine. Unfortunately, a large proportion of this drivage has been in dead and poor ground, but still a large section of very valuable ground—particularly in the north part of the mine—has been opened up, as a reference to the very ample report furnished by the managers will show. Since the 1st of August, the date to which the published accounts are made up, sales realising nearly 9000*l.* have been made. After a careful survey of the company's financial position of this date, your directors yesterday declared a dividend of 5s. per share, payable as usual in 14 days from that date. In concluding the report, the directors are glad to be enabled to say that, taken as a whole, the prospects of the mine are much more encouraging than they have been for some time past.—GEORGE W. DUMBELL, Chairman; JAMES SPITTALL, RICHARD PENKETH, FREDERIC BROADBENT, PAGET MOSLEY.

The CHAIRMAN: Well, gentlemen, I consider it is very gratifying and satisfactory to hear so good a report read as that. In fact it was not to be expected that the report could have been anything like so satisfactory. When you come to consider the load that has been laid upon the company in one way or the other, I think you will agree with me that we have done wonders in paying off our debt, in paying a dividend, and in creating a much larger fund than we had before. I say that none with a mine free from prejudice can look at the facts as they are set forth in black and white without being satisfied that the mine has really done well. If the metal market had been what we had fair reason to expect it would be, if we could have obtained even an ordinarily fair price for lead and blende, we should have been, of course, much better off; but, as things were with a falling and a dropping market, I think we have done wonders. We have not set forward anything but what is substantially supported by the report of the managers, and what can be borne out by the facts. I hope that, while I am spared to be among you, no attempt will be made to force the value of the shares. What they may be worth in the market, and intrinsically beyond the market, are two very different things. Let them stand or fall upon their own value and not puffed up. I know that people have been led to expect great things, and I know that some on the other hand have been induced to part with their shares at a rate far below their value, even as things are now. But you cannot have any great company if it is an honest company which is not subject to that sort of thing. At the same time, so far as I know, we have tried to discourage that in all instances. I am frequently applied to by parties to know why we do not give quarterly dividends as usual, and others say in effect, "Why do not you tell me all you know about the mine?" The simple answer I give is to tell all of them to apply to the secretary, and I hand the letters over to him. He must then tell them as much as he likes, and no more, but he certainly will not advise them as to selling or buying. It is a settled rule to do neither one nor the other. It is not fair that any person should get any information that is considered private from any officer of the company, especially the directors or secretary, and so be able to take advantage of another person in the market. I hope it will never be done in the case of this mine. There are several very nice points, indeed, about Great Laxey now. As you will see, there is a very interesting point connected with the northern part of the mine. We have done all we could to follow that up, and, so far as I can judge, and taking also the report of the managers, it does look as if the mine was going into new ground of an old character, and that we shall again have the mine near the surface. It seems to commence a very short way from the surface, and seems to go north. I am in almost daily communication with the mine, and I do not believe there is a man in the mine, or connected with it, who does not endeavour to do his duty in the best manner possible for the benefit of the mine. (Applause.) I may say here that we have not forgotten the managers, and that we have voted them the gratuity we always vote at the Douglas meeting. Capt. Reddicliffe and Capt. Rowe will find that they are remembered. I believe that they do their duty, and face every difficulty that arises, but there are several ways of doing that. While averring what we consider is right, and scouting what we believe not to be right, it does not do to rush determinedly in the face of the authorities that rule over us. We are bound to be on the alert, but all the same courteous to all parties who represent government in our mine; but we are not bound to do all that may be proposed. We must maintain our position if we are right, but rather give way in trifling matters; but in any material point connected with the working of the mine we must main our independence, so far as we feel sure we are right. I now beg leave to move that the report of the managers, and the balance-sheet, together with the directors' report, be adopted, and circulated amongst the shareholders in the usual way.——Mr. CALEY seconded the motion, and it passed without further comment.

The CHAIRMAN: The next matter is the election of directors. There must be two English and three Manx directors, and two must retire from office now, so I move that the two English directors, Mr. Broadbent and Colonel Mosley, retire.——Mr. CALEY seconded the motion, which was agreed to.

Mr. BARBER then proposed the re-election of Mr. Broadbent and Colonel Mosley. The proposition was seconded by Mr. CALEY, and unanimously agreed to.

Mr. BROADBENT: I have to express to you my renewed and repeated thanks at the confidence you have again shown in me in re-electing me a director of Great Laxey. I can only say that as a board we work most energetically and harmoniously together, and I hope we shall always do so, and that we shall do everything in our power to further the prosperity of the company. (Hear, hear.)

Colonel MOSLEY: Well, gentlemen, I have very few words to say. First of all, I thank you most cordially for again reposing your trust in me. My friend Mr. Broadbent has almost taken the words out of my mouth when he says we work harmoniously together. I am connected with two or three undertakings of a similar nature, but there is not one in which I meet with more harmony, or greater friendship, than I do on the board of this company. (Hear, hear.) Not only at the board, but on my annual visit to the Isle of Man, which I look forward to and enjoy, I have the pleasure of seeing many old faces among the shareholders too. I thank you for your confidence, and assure you that anything I can do is not only cheerfully done, but most willingly done. (Applause.)

On the motion of Mr. CALEY, seconded by Mr. BARBER, the auditors, Messrs. F. Falkner and M. M. Bridson, were re-elected.

Mr. FALKNER: I beg to thank you very much for the honour done me. I have only to add that it gives me very great pleasure to see our respected Chairman once more at the meeting. (Applause.)

The CHAIRMAN: I wish to return thanks to all those shareholders who are not present but who have sent in their proxies. I have an immense number of votes here upon which the directors could act if necessity required it. The only way in which I can do so is through the Press, and by that means I cordially and heartily thank them. It is a great comfort to me to receive a large bundle of proxies like that. It is gratifying to one tied as I am to find one's-self so cordially and amply supported. I can fight yet—(hear, hear)—but I do not court it. I wish to have peace and quietness, and to do all the work I can, but so long as I am spared I shall resist to the utmost any attempt to impose upon the company, and to resist anything that, in the opinion of the directors, is wrong.

Mr. BARBER; I beg to move that the best thanks of this meeting be given to the directors, especially the Chairman, to the secretary, and all the officers connected with the mine.——Mr. RYDINGS: I have very great pleasure in seconding that. I am very pleased to see the Chairman of the directors here. (Hear, hear.) I think a Great Laxey meeting without Mr. Dumbell would be like the play of Hamlet without Hamlet himself. (Laughter, and hear, hear.) I hope he will be spared to come here for many years, and that he will help us to build a railway to Laxey, so that he can make Laxey as a village what he has made Laxey as a mine. (Hear, hear.)

The CHAIRMAN: I can only say for myself and co-directors that so long as we are supported by the body of the shareholders in the way we have been supported we will endeavour to carry out their wishes and desires to the utmost, for our own benefit and theirs. It is very gratifying to come to a meeting, I do not care whether it be large or small, and find that there is no clap-trap, nor vexation by shabby little questions such as "What did you do with that sixpence?" or "Where did you lay out that eighteenpence?" or "What did you pay for that piece of pipe for the engine-shaft?"—(laughter)—and this, that, and the other. Those are the things that cause annoyance. I thank you again on behalf of my co-directors for the kind way in which you have proposed and received this motion of thanks.

During the meeting a general conversation took place with reference to the proposed railway to Laxey. Mr. RYDINGS stated that in his opinion it was a thing very much wanted, and he thought it would be the best paying line in the Isle of Man.

Captain PENKETH supported those remarks, and stated that he had every confidence that the line would pay.

It was stated that the Laxey people were to a great extent in favour of it. Every visitor almost, or at least one in 10, visited Laxey, and numbers went there several times. To give some idea of the number of persons visiting Laxey during the season, it may be recorded that 30,000 persons went up Great Laxey wheel during the present season, and it was stated on the authority of Captain Reddicliffe that only about one-seventh of the total number who went to look at the wheel paid to go on to it, and in addition a great number of persons passed through the village.

Mr. RYDINGS also thought a great many people would take up their residence in Laxey if it was connected with Douglas by rail.

Colonel MOSLEY said the scheme was thought very well of in London, providing it was brought forward by people connected with the island. In good hands the thing was bound to go on.

There was nothing further before the meeting.

ANOTHER INLAND STEELWORKS TO THE COAST.

This is the explanation of the important news from Staffordshire concerning the action which has just been determined on by Messrs. Nettlefolds (Limited), the firm of world-wide reputation as producers of wire, and wire-rods, screws, and other metalliferous products, and who have also taken a considerable stand as iron and steel-makers. The Clapp and Griffiths' steel process is laid down at the Castle Ironworks, Shropshire, of Messrs. Nettlefolds, and for some time past they have been regularly producing steel in the form of ingots, blooms, billets, bars, hoops, wire rods, and the like, while from their ironmills they have turned out bars—round, square, and flat—wire rods, nail rods, hoops, tyres, &c. The works are comparatively new, having been only laid down a few years, and their erection cost the present proprietary, it is asserted, something like 80,000*l.* That it should have been found necessary to remove so new a works from their present position to Newport, Monmouthshire, is the more irresistible indication of the lessened chance which the works in the interior of the country stand in competing against works upon the coast if extensive export business is to be carried on. Doubtless every means have been tried by Messrs. Nettlefolds to effect economies, so as if possible to avoid so costly an expedient as wholesale removal. But nothing has been of sufficient avail to cope with the heavy charges involved by the conveyance of raw materials from South Wales to Shropshire and the carriage of the manufactured products from Shropshire to the various shipping ports. These rates are mentioned as 9s. 6d. to Liverpool, 12s. 6d. to Hull, and 15s. to London, and it is said that all attempts to induce the railway companies serving the district to revise their scale have been without result. The railway companies will have, therefore, only themselves to thank when the find that Messrs. Nettlefolds' trade has been lost to them. An idea of the magnitude of this trade may be formed from the circumstance that Messrs. Nettlefolds estimate that the step which they have determined to take will result in a saving on the score of railway rates alone of some 15,000*l.* yearly.

The loss to Shropshire and Staffordshire which will be the outcome of the removal will happily be the gain of Monmouth. The new works are, it is understood, to be erected some 5 or 6 miles from Newport, near the River Usk, and will rank as part of the Welsh trade, to which, doubtless, they will be a very welcome addition. It is satisfactory that Messrs. Nettlefolds should have determined to continue to be manufacturers rather than that they should close their Shropshire works and not erect others. The race among the steelmakers is becoming increasingly severe, and the newer centres are making all the running. Under these circumstances the important Midland firm are to be congratulated upon the wisdom and pluck which they have shown in determining to move with the times, notwithstanding the heavy expense involved. In addition to the 80,000*l.* spent upon the Castle Works, 40,000*l.* has, it is stated, been laid out on the adjacent collieries. Fortunately for the company these mines are held under only 12 months' notice leases from the Duke of Cleveland. No great difficulty, it is therefore to be assumed, will be incurred in getting out of this property, though, of course, the capital which has been expended in opening them up for work and the like will have to be sacrificed. Even this, however, is preferable to continuing to stay on under circumstances which could not be made profitable. Whether his Grace will be likely early to find another tenant remains to be seen. For the present, however, the collieries are, of course, still in operation. If the conditions of steel manufacture should continue as now, and the railway companies should maintain their policy in the matter of conveyance rates, it will be only what we should expect if by-and-bye we should hear that yet other inland steelworks had determined to follow the example of Messrs. Cammel and of Messrs. Nettlefolds, and go to the coast.

THE EBERHARDT COMPANY.

An extraordinary general meeting of the Eberhardt Company (Limited) was held at the City Terminus Hotel, Cannon-street, on Tuesday, for the purpose of considering, and, if deemed expedient, passing the subjoined extraordinary resolution:—"That this company be wound up voluntarily." Mr. BLADON presided, and Mr. W. R. WRIGHT (the secretary) having read the notice convening the meeting,

The CHAIRMAN said he need not say how much the directors regretted the necessity for calling the shareholders together on the present occasion, but they had no alternative. They were all aware of the report by Capt. Drake, recommending the purchase of the Monitor Mining property. It was believed that the purchase of the property would give life to the Eberhardt, and would have enabled the company to avoid liquidation; and, further, it would have restored a marked value to the Eberhardt shares. The purchase would have been of the utmost practical advantage, and would have left a handsome surplus. The proposed purchase, however, fell through, and the directors therefore, considered it to be their duty to bring forward a scheme for reconstruction. The capital of the present Eberhardt Company consisted of 208,000 shares of 1*l.* each, or 208,000*l.* and the mortgage debentures amounted to 11,438*l.* It was now proposed to form a new company, with a capital of 240,000 shares of 1*l.* each, to consist of 225,000 ordinary shares, and 15,000 preference shares, to be entitled to a preferential dividend of 10 per cent. per annum only out of the profits of each year, to be convertible into ordinary shares at the option of the holders, and to be redeemable by the company at par, unless so converted, after a month's notice. The preference shares to have a preference as regards capital in the event of a winding-up. The shares in the new company to be apportioned thus:—11,431 of the preference shares of 1*l.* each to be issued as fully paid-up, in exchange for the surrender of the mortgage debentures; 11,431 of the ordinary shares of 1*l.* each to be issued as fully paid-up, by way of bonus to the holders of the mortgage debentures on the exchange of the said debentures for preference shares; 20,000 ordinary shares of 1*l.* to be issued as fully paid-up, in exchange for the preference shares in the present company; 188,000 ordinary shares of 1*l.* each to be issued in exchange for like shares in the present company, share for share, such ordinary to be credited with 15s. paid up on each; 3569 preference shares to be held by the company in reserve; 5569 ordinary shares to be held by the company in reserve; total, 240,000. When at the meeting a short time ago it was clearly stated by the directors that it was imperative that the Monitor property should be purchased, or that the company must be voluntarily wound-up unless the shareholders liberally subscribed, there was no response at all adequate to the requirements of the company. Captain Drake and Mr. Applegarth liberally came forward, and, with other assistance, there was raised some 12,000*l.*, which was subsequently supplemented, but only to an amount of something under 1000*l.* The shareholders had been distinctly asked to subscribe to the purchase of the Monitor Company, with the view of saving the ordinary shareholder from being absolutely "wiped out," so far as any practical return or any real value of his shares might be concerned. It was the anxious wish of the directors and of the debenture-holders that the ordinary shareholder who could not pay, and the ordinary shareholder who could, but who declined to pay, should be protected, as well as that the interests of the preference shareholders and the debenture holders should be looked to. He begged formally to move, "That this company be wound up voluntarily."——Mr. ALFRED LEWIS SACRE seconded the motion.

After some desultory discussion, the motion was put and carried unanimously.

The CHAIRMAN then moved the adoption of the scheme as proposed by the directors, which motion having been seconded, Mr. KING and Mr. PLEWS opposed—the latter threatening an injunction in Chancery.

Various explanations were then given by the Chairman relating to the right of different classes of shareholders and the extreme anxiety of the board to do justice to every proprietor in the company.

Mr. SNELL, in a somewhat elaborate statement, proposed an alternative scheme:—Capital 250,000*l.*, in 1*l.* shares; 188,000 ordinary shares 15s. fully paid; 20,000 ordinary fully paid, to be given to preference shareholders on their subscribing for 20,000 ordinary shares 15s. paid; 2288 for interest on debentures, 13,800 reserved to pay debenture interest for three years; 5912 reserved for future issue: total, 250,000*l.* 208,000 shares 15s. paid when fully paid up will realise 52,000*l.*; 1s. on application 10,400*l.*; 1s. on allotment 10,400*l.*; 1s. in three months 10,400*l.*; 1s. in six months 10,400*l.*—41,600*l.* 5*l.* per cent. on 228,000*l.*=11,400*l.* Debentures to be secured upon the present property of the Eberhardt Company. The debenture-holders to have the option of exchanging their debentures at any time for shares at par. To be set apart half the profits from the Monitor property after paying 5*l.* per cent. on capital towards working the Eberhardt property.

This alternative scheme was unanimously adopted by the directors, Mr. Bladon expressing the view that it was a preferable one to that set forth by the directors. Finally, it was agreed that a committee, with power to add to their number, consisting of Mr. Snell, Mr. Charles King, and Mr. Tamplin, should be appointed to confer with the directors and complete all necessary details, and that a final and complete scheme should be presented to the meeting to be held a fortnight hence.

The steel trade in Staffordshire and in the adjoining county of Shropshire is just now undergoing gratifying development. Ironmasters are persuaded that, notwithstanding that the major part of the shipping orders must necessarily be secured by steel firms upon the coast consequent upon their lower prices, still that there is a field for inland steelworks in supplying home wants. Those wants largely take the form of partially manufactured steel for rolling down in the iron mills, and which is supplanting the product of the puddling furnaces. The Lilleshall Iron Company, Shropshire, who have long been known as best pig-iron makers, are about starting a second converter at their steelworks upon the Basic-Bessemer system, and are arranging for the laying down of a cogging mill. The converters are supplied direct from the blast furnace, which is charged with a selected Lilleshall metal as low as possible in silicon. At present the metal is hammered out after being cast, but the cogging mill will soon supplant the hammer. The product is declared to be equal to Siemens' Martin steel, and is rolled down at the adjoining Snedshill Ironworks into plates, sheets, angles, and the like. Orders have lately been rolled for plates and angles for Sir W. G. Armstrong, Mitchell, and Company, and boilers upon the Galloway tube principle have also recently been constructed from plates of this steel. The Steel and Iron Ingot Company, Bilston, near Wolverhampton, established upon the basic system, are now by an alteration in the manner of working the converters obtaining much of the benefit of the said process. The length of life of the converters is thereby naturally prolonged, and the quality of the steel is improved. Three converters are at work, and powerful cogging and rolling plant, while it is in contemplation to put down two other converters. The metal is being rolled into boiler plates for leading engineers in Yorkshire and Lancashire, into thin sheets for stamping purposes, tin-plates, tube strips, and the like.

A fatal accident occurred at Spindle Point Colliery, Kearsley, on Tuesday. William Whitehead, collier, aged 40, was standing with the fireman examining the place where he had been working the previous day when about 3 tons of coal became detached from the roof and fell upon him. It just missed the fireman, and he got assistance and extricated Whitehead, who died an hour afterwards.

Messrs. FRY, JAMES, and Co, write under date October 15:—Copper continued to decline in price from the date of last issue until the 8th instant, when 39*l.* 5s. per ton was touched for Chili bars; there was then a recovery of about 10s. per ton, which, however, was not maintained, and prices have gone back to 39*l.* 7s. 6d. per ton. The smelters reduced their prices for manufactured on the 8th instant by 2*l.* per ton. Iron has been fairly steady, the value of Scotch pig being 42s. 6d. per ton for warrants. Tin has fluctuated between 90*l.* 10s. and 92*l.* per ton for fine foreign, closing at 91*l.* per ton. Lead: No change. Tin-plates steady.

Mining Correspondence.

BRITISH MINES.

BEDFORD UNITED.—J. Trezise, October 13: The rise and stope in the back of the 133 east is worth 8*l*. per fathom.—Bridge Lode: In the 90 west the lode is without any particular change, composed of spar, capel, and mundic. We have holed the 75 west to the winze sunk below the 62 which has given us good ventilation. The lode in the present end is unproductive. In the 62 east the lode is a little improved, producing saving work for ore and mundic. No 1 stope in the bottom of the 62 is worth 6*l*. per fathom. No. 2 stope in the back is worth 5*l*. per fathom. No. 3 is worth 4*l*. No. 4 is worth 5*l*. per fathom. In the 62 west the lode is unproductive. The tribute pitches continue to yield ore and mundic in paying quanities. All other points are without change.

BLUE HILLS.—William Rich, October 12: We have completed the tramway from the engine shaft to the end of the 30 fm. level east, and are urging on the extension of this level. The lode in the end carries a little tin, and we hope it will soon improve. The rise in the back of the 30 fm. level near the shaft carries stones of tin. The lode in the 66 end east is improving, now worth 12*l*. per fathom, and is letting out water freely. The stope in the back of this level is worth 18*l*. per fathom. We are putting out a cross cut south towards the lode in the 50 fm. level east. We expect to intersect the lode in driving 3 or 4 fms. more. The west end of the stope in the back of the 50 fm. level is worth 20*l*. per fathom. The lode in the trial shaft near East Blue Hills carries good stones of tin.

CARN CAMBORNE.—W. C. Vivian, October 15: We have commenced driving the 105 north from the south lode in the cross course, and have advanced 9 ft., the cross course thus far maintaining its width of about 4 ft., and having no underlay to speak of. Our progress in exploring will now be much more rapid than it has ever before been since we have reached and been driving the 105. In driving the said level west of the cross course the lode declined in size after I wrote you last week, and the appearances became less encouraging, so I thought it best to commence at once opening through the cross course in search other lodes.

CREIGIOG.—H. Hotchkiss, October 14: In the 130 yard level, west of Meadow shaft, we are making satisfactory progress in the driving of the end. The lode in present forebreast is without material change to notice since my last, the matrix of the lode being highly promising, and shows traces of lead and blende ores. Water still comes from the forebreast.

CRAVEN MOOR UNITED.—David Williams, October 15: In the main cross-cut north-east from Blackhill adit level rather slow progress has again been made owing to the large quantities of water bursting forth from the face and roof of our cross-cut. We have passed through another east and west lode here, principally composed of calcspar, with occasional stones of lead ore. We have still several fathoms more to drive to intersect the main lode, which, as proved in Gill's shaft above, is dipping very rapidly northwards. In Gill's shaft excellent progress continues to be made, the lode improving both in size and value as we go down, and is to-day fully 7½ ft. wide, carrying sulphate of barytes, with splendid branches and patches of blue and grey lead ores. We look forward with interest to the junction of this with the flat lodes at which intersections the richest deposits of ore are invariably found in this formation. On surface we have a good pile of lead stuff, which we shall commence dressing in the course of a few days.

D'ERESBY.—John Roberts, William Sandoe, October 14: On the heading lode we have commenced sinking in the lead ground; the lode in the south end of the shaft is looking very well, and in the north end there is a good mixture of lead through the lode, altogether quite as good as reported before. We have completed the retimbering of the Gors shaft, and have made a very good job of it. At the bottom of Gors shaft we have about finished cutting plat ground for the tackle and cistern, and are now putting in the necessary timber, and in a day or two we shall commence sinking.

DEVON GREAT CONSOLS.—Isaac Richards: Wheal Maria: The ground in the eastern shaft, sinking below the 12 fm. level on the Capel Tor lode, continues of a favourable nature, and fair progress is being made in sinking. In the 12, east of the engine-shaft on the Capel Tor, the lode maintains a good size—4 ft. wide—and is composed of strong capel with quartz, mundic, and a little copper ore.—Wheal Emma: Railway Shaft, New South Lode: In the 220, west on the south part of the lode, the drivage is being continued by the side of the lode.—Watson's: In the engine-shaft, sinking below the 124, fair progress is being made. The drivages both east and west at the 124 are being continued by the side of the lode. The same remark will also apply to the drivage at the 112 east of the engine-shaft. In the 112, west of the engine-shaft, the lode is 3 ft. wide, of a promising character, and is yielding a little good quality copper ore, and 2 tons of mundic per fathom. The other points of operation throughout the mines are without important alteration.

DRAKEWALLS.—Thomas Gregory, October 15: We are making fair progress, taking other shaft work into account, with the sinking of the engine shaft below the 102; the lode is standing off a little to the north, but from the bottom of the shaft we are breaking some good stones of tin, with more wolfram and mica than formerly. We have a strong flow of warm water from the north lode, which has drained the upper north ground.—North Lode: The lode in the 50 east is producing much wolfram and mundic, with some saving work for tin. In the same level west the lode has not been taken down to the end. The question of how to deal with the wolfram as in former times is now under consideration.

DUCHY PERU.—R. and J. Nancarrow, October 13: Since last report we have reached what we think to be the south or hanging wall of the lode in the 80 west, and we are now gaining around to the north, where we have a fine-looking lode for the part carried, and producing beautiful blende; here we are fully expecting an early improvement. We are still cross cutting through the lode in the 70 fm. level west, where it has improved both for progress and appearance, and we purpose to continue in this direction until we reach the south or hanging wall, so as to ascertain its value. The tribute pitch behind this end has further improved, and producing splendid blende, and looks likely to open up a lasting and profitable piece of ground; the other pitches at the shallower levels are looking quite as well as a fortnight ago. We sampled two good parcels of blende last week, and are proceeding favourably with others, which we consider is still improving in quality. The surface operations are proceeding with all regularity, and the pumping, winding, and crushing engines with other machinery and pitwork, are all in a satisfactory state.

EAST BLUE HILLS.—S. Bennetts, W. K. Mitchell, October 14: The north part of the lode continues to underlie slightly faster than the line of the shaft, and for the time it is left standing in the hanging wall, and worth 8*l*. to 9*l*. per fathom. The south and principal part of the lode being under foot, has not been cut into since last reported on. The fact of the main part of the lode having taken a more perpendicular dip, looks more favourable than otherwise for future productiveness. The east end at the 20 fathom level is worth 10*l*. per fathom, and the west end at the same level is worth 8*l*. per fathom; the 10 fm. level east is worth 6*l*. per fathom.

EAST WHEAL LOVELL.—Thomas Quentrall, October 14: The lode both in he shaft, and the end is looking quite as well as last reported, and we are now nding some good tinstuff to the stamps.

GAWTON.—Moses Bawden, October 15: Setting Report: The 117 fathom level to drive east, by two men, at 8*l*. per fathom. The part of the lode carried is 5 ft. wide, and will yield 10 tons of arsenical mundic per fathom. The 105 to drive east, by four men, at 9*l*. 10s. per fathom. The part of the lode carried is 6 ft. wide, and will yield 8 tons of arsenical mundic per fathom. The 95 fm. level to drive east, by four men, at 9*l*. per fathom. The part of the lode carried is 8 ft. wide, and will yield 20 tons of rich arsenical mundic per fm. We are cutting into this lode still further south, and find it of the same productive value. We shall continue this work to prove its full size. Stope in the back of the 117 fathom level east, by four men, at 5*l*. 10s. per fathom. Stope in the back of the 105 fathom level east, by two men, at 4*l*. 10s. per fathom. Stope in the back of the 105 fathom level east, by two men, at 4*l*. 10s. per fathom. Stope in the bottom of the 95 fathom level east, by two men, at 4*l*. 15s. per fathom. Stope in the back of the 95 fathom level east, by two men, at 3*l*. 10s. per fm. Stope in the back of the 95 fm. level east, by two men, at 4*l*. 10s. per fathom. Stope in the back of the 95 fm. level east, by two men, at 4*l*. 10s. per fathom. Stope in the bottom of the 70 fathom level west, by two men, at 4*l*. 15s. per fathom. Stope in the back of the 70 fathom level east, by four men, at 4*l* 15s. per fathom. Our stopes will each yield on an average about 9 tons of arsenical mundic per fathom. I am pleased to say that the lode in the 95 east is continuing to lay open some very profitable ground, which will enable us to maintain our returns of arsenic for a considerable time.

GREEN HURTH.—James Polglase, October 8: We are now rising in back of bottom level to hole to the winze in 44 fm. level north, vein worth 12 tons per fathom. Stope in back of 44 fm. level is worth 4 tons per fathom. The 44 end more promising for ore. No. 1 stope in back of 44 fm. level is worth 1 ton per fathom; No. 2 stope in back of 44 fm. level is worth 2 tons per fathom. The 30 end north is worth ½ ton per fathom. Winze below 30 is worth 1 ton per fathom. Nos. 1, 2, 3, and 4 stopes in back of middle level are worth 8 tons per fm. The adit level north of new footway; no change. We are cutting a winze plat in the adit level east preparatory to sinking below the level. Good stones of lead in bottom of level; this is encouraging. Dressing going on well.

GOODEVERE.—R. Knott, October 14: There is no change in the deep adit end east since the date of my last report. The end is reset at 6*l*. 10s. per fm.—2 fms. stent. I am pleased to say that the ventilating machinery answers admirably; in fact, it is now forcing air close upon 200 fms. with about half the speed to which we can increase it to if necessary, and I have no doubt that we shall carry on the work of this long drivage successfully. It will, in all probability, bring the mine to a successful issue in the intersection of the higher shaft lode, and laying it open for profitable working. The carpenter will complete the house for the protection of the belts in a day or two.

GREAT HOLWAY.—W. T. Harris, October 15: Roskell's Shaft: In the 95 level north the ground continues favourable for progress. Am daily expecting a profitable change.—Level Engine Shaft: In the 80 level end the ground is favourable for progress, and congenial for production of lead. Water issues freely from the forebreast, also a good mixture of lead and blende is occasionally met with.—Tribute: No. 1 pitch in back is worth 5 cwts. lead and 15 cwts. blende per fathom. No. 2 pitch is worth 10 cwts. lead and 15 cwts. of blende per fathom.—The 60 Level: No. 1 pitch in back west is producing 10 cwts. of lead and 1 ton of blende per fathom, also sinking to communicate with the No. 5 pitch for ventilation, dispatching stuff, and to facilitate operations generally. In No. 2 pitch west the four points in progress yield from 1 ton to 2½ tons lead and 1½ ton blende per fm. Nos. 3 and 4 pitches 5 cwts. of lead and 15 cwts. of blende per fathom respectively. No. 5 pitch in back west 1½ ton of lead and 1½ ton of blende per fathom. No. 6 pitch in back has improved, worth 1½ ton of lead and 1 ton of blende per fathom. No. 7 pitch east 8 cwts. of lead and 1 ton of blende per fathom. The same applies to No. 8 pitch. No. 9, 15 cwts. of lead and 1½ ton of blende per fathom. No. 10 in bottom end 10 cwts. of lead and 15 cwts. of blende per fathom.—Brammock Shaft: No. 1 pitch, in back of 60 east, is yielding 1 ton of lead and 1½ ton of blende per fathom; No. 2, 10 cwts. of lead and 1 ton of blende per fathom. Dressing and surface work proceeding with usual regularity. Have sampled 24 tons of lead, and shall sample 50 tons of blende this week.

GREAT WEST SHEPHERDS.—R. and J. Nancarrow, October 13: Browne's Shaft: Having driven the cross-cut north of the shaft at the 30, and intersected two promising lodes about 6 fms. apart, we have commenced driving east and west on No. 1 lode, which is about 3 ft. wide, producing lead and blende, but not in sufficient quantities to value at present, although of a very encouraging character. We have just touched Mudge's or the south lode at the same level; it is letting out a quantity of water, and we consider this a favourable indication for mineral, although we have not seen sufficient of the lode to ascertain its size and character. There is no change in the lode going east at the 16. As we have not been able to work much in this end in consequence of the air being so impure, we have set the men preparing to sink a winze in the bottom of the 16 to prove the lode and ventilate the 30 or bottom level.—New Engine Shaft: This shaft is still being sunk below the 30 by a full staff of men, and good progress is being made. All other work at surface is progressing favourably, and the machinery is working well.

HARDSHINS.—Manager, September 18: The new vein we got in the whim still continues very rich for ore being fully 2 ft. wide this morning. The bearing of the vein seems to be due east and west. We are still 4 fathoms back from the Old man's forehead, and we have about 2 ft. of stone lying between our vein and the old drift. We have got 2 fathoms laid open, and the drift soles look best for ore. We have four men driving cross-cuts north, and they have cut a nice little vein this week about 14 in. wide, which contains a nice sample of lead ore; but it cannot be the vein we were cross-cutting, for as it has only 9 in. of throw, and the Lancelotts has 4½ fathoms.

— September 25: The vein is even looking better this morning, being fully a yard wide at the drift sole and 2 ft. at the roof. We broke into a lough hole last night and it was beautiful; there would be quite two barrowfuls of sieve ore ran out of it.

— October 2: All going on well here. The vein is still very rich, and fully a yard wide at the drift sole.

— October 9: The vein continues to improve. There is now 4 ft. of vein at the drift sole, but it is bending more away from the Old Man's drift than it was at first, so I have every reason to believe it to be a separate vein from the one worked by the old man.

HEALEYFIELD.—John Trelease, October 9: Since my last report we have sunk into the bottom part of the Firestone sill, from the sole of the Smithy level, where we find good strings of lead. I have set a tribute bargain to stope out the bottom of the level at 35s. per bing for three months forward. Our No. 1 stope above the Grinstone sill is now up to the plate, and only 4 fathoms below the surface. No. 2 stope still maintains its value, 12 cwts. of lead per fathom. No. 3 stope, 10 cwts. per fathom, and No. 4 stope 8 cwts. per fathom. The rain has increased our water supply a little for dressing purposes. All surface and engine work carried forward with the utmost dispatch. We are busy dropping in the pitwork in the Whitwell shaft, connecting the main rods, &c., to the beam.

HOLYWELL DISTRICT LEAD.—R. Rowlands, October 15: This week we commenced working on the excellent lead in the roof of the new lode yield about 25 to 30 cwts. per fathom. We are also engaged on the discovery in No. 2 cross cut previously reported, where the ground continues to look very rich and is yielding some splendid lumps of ore, some pieces reaching nearly 200 lbs. in weight. This point is looking excellent and turning out 30 cwts. of lead per fathom. At No. 3 cross-cut there is no change of importance, but No. 1 tribute pitch is improving.

LEADHILLS.—Arthur Waters, October 15: George's Roust Vein: Gripp's adit, going north of Muir's cross cut, shows a congenial rock and kindly-looking lode, but there is not any ore in sight at present to value.—Brown's Mine: The 115, going south of Jeffreys' engine shaft, is in a lode 4 ft. wide, composed of quartz and stones of lead ore. The winze below the 100, south of shaft, is 3 fms. 6 in. deep; lode 5 ft. wide, worth 30 cwts. of lead ore per fathom. No. 1 stope above the 100, south of said shaft, is worth 25 cwts. per fathom, No. 2 stope 45 cwts., No. 3 stope 45, and No. 4 stope 60 cwts. The 100, going south of Wilson's shaft, is driven 54½ fms.; lode during the last month averaging along the roof 1 ton, and along the bottom of the drivage quite 2 tons per fathom, present end being worth 1 ton per fathom. No. 1 stope in back of this level, south of shaft, is producing 70 cwts. per fathom. No. 2 stope 55 cwts. per fm. The 85, going north of Jeffreys' is driven 70 fms. 4 ft.; lode 5 ft. wide, of a promising character. The winze below this level, south of Jeffreys', is 2 fms. 2 ft. deep; lode 6 ft. wide, worth 45 cwts. per fathom. The stope above 70, south of Wilson's, is worth 25 cwts. per fathom. The stope north of shaft is producing 40 cwts. per fathom. Stope above 41 fm. level, south of shaft, worth 25 cwts per fathom. The 10 south of No. 2 winze, south of the above shaft, is in a lode 4 ft. wide, worth 35 cwts per fathom. Stope in back of ditto, north of No. 1 winze, is worth 30 cwts. per fathom. The stope south of winze is worth 45 cwts. per fathom. Gripp's adit, going south of Wilson's, shows a lode 5 ft. wide of kindly character. No. 3 winze below this level south is 4 fms 5 ft. deep; lode 3 to 4 ft. wide, worth about 2[illegible] cwts. per fathom. Stope above adit south is worth 25 cwts. per fathom.—Raik Vein: Pitch above Gripp's, south of Reid's shaft, by four men at 90s. per ton, is worth 20 cwts. per fathom.

MELLANEAR.—John Gilbert, October 14: There is no change in the 70 cross cut, driving north of the main lode, east of Gundry's engine shaft. This level has been extended about 12 fathoms, and for a long time past the stratum has been very congenial for mineral, and we have intersected several small branches, but have not succeeded in meeting with anything to value. In the 110, west of Gundry's shaft, the lode is 4 ft. wide, yielding 2 tons of copper ore per fm., and looking kindly for further improvement. This level is just under some productive ground we had in the level above. The lode in the 120, east of shaft, is 3½ ft. wide, and yielding 1 ton of copper ore per fathom, and saving work for mundic and blende, and the ground is a little easier for driving. The lode in the 130, west of shaft, is 4 ft. wide, and worth for tin 6*l*. per fathom, and is also yielding some saving work for copper ore. The rise in the back of this level is worth 7*l*. per fathom for tin. The lode in the 130, east of shaft, is 6 ft. wide, and yielding 2½ tons of copper ore per fathom, and some rich stones of tin. This level has gone through 14 fathoms of lode, worth on an average 3½ tons of copper ore per fathom. This would be very profitable ground at the price we were having for copper a little while ago. The rise in the back of this level is yielding 3½ tons of ore per fathom. The lode in Gundry's shaft is 6 ft. wide, and yielding 1 ton of copper ore per fathom. The shaft is sinking on the north part of the lode, and is down about 6 fathoms below the 130 fathom level. We have not seen the south part of the lode in sinking the shaft, but that part has been the most productive in the level above. All our machinery is in good working order.

MID-DEVON COPPER.—James Neill, October 10: Surface: Machinery throughout working smoothly and well.—A Shaft: The 98 cross cut south extended by nine men with boring machinery 1 fm. 0 ft. 9 in.; total distance from shaft 1 fm. 5 ft. 6 in.; the strata is mineralised, congenial, and porous, with large streams of water issuing from end, which I find is draining the shaft for some distance above, and have no doubt it will gradually drain the lode to this depth, and prevent any excessive influx of water when it is intersected.—C Shaft: The stope in back of cross-cut north from 50 east, worked by three men, shows a little improvement, and will now yield 3 tons of ore per cubic fathom; the ore is chiefly yellow in branches coursing east and west with very promising strata.

NEW CARADON.—N. Richards, October 14: During the last month every effort has been made to force on the work throughout the mine. No. 1 lode east at the 60 fathom level has been much disordered and twisted by cross heads and branches; but I am pleased to say it maintains its size, 3 ft. wide, and the ground appears to be more settled, and the lode better defined, spotted with mundic and yellow copper ore, consequently we shall now be almost daily expecting to get a further improvement. This lode west at this level is near 2½ ft. wide, also showing spots of mundic and yellow ore, and from its present appearance ought soon to be producing saving work for copper. The pitwork and machinery are working well, and the water is being easily kept out of the mine.

NEW TRUMPET CONSOLS.—Thomas Quentrall, October 15: Since may last report the lode in the 40 fm. level driving west has improved. It is now producing rich copper, and appears to be entering the run of copper ore ground driven through in the 28 fm. level, which is several fathoms further west than the 40. As soon as we have driven the 40 a few fathoms further we purpose sinking a winze below the level. Two trial winzes have been already sunk a short distance below the 40. The lode in these winzes is gradually changing from copper to tin, and very rich stones of tin have been broken from the bottom of the winzes. I have no doubt that if they were sunk a few fathoms deeper a good run of tin ground would be met with, as in these setts copper has always been followed by tin. This is the more probable from the fact that the lode in the shaft showed a decided improvement for tin in the last 2 or 3 fms. sunk, and it is getting very similar to the rich lode at the deeper levels in the late working. If copper had not fallen in price as it has, we should have about paid cost even from copper alone. I would advise the sinking of Trevethick's shaft, and the opening up of another level as rapidly as possible, when I think our position will be very different. In the meantime, the reserves of copper may remain intact until the price improves. If developed in depth, I believe we shall quickly open up a profitable mine.

NEW WEST CARADON.—N. Richards, October 14: The new lode in winze sinking below the 38 fathom level east will yield about 1½ ton of ore per fm. This lode in the rise west of cross-course at this level will yield from 1 to 1½ ton of copper ore per fathom.

NORTH BUSY UNITED.—John James, October 15: In the 15 fm. level, east of cross cut, No 1 lode, the ground is easier for driving, and letting out more water; this is a good indication, and we are getting near the junction of lodes. In the south cross cut we have had a little harder ground, and have not made the progress we expected. From the appearance of the ground the lode may be cut any day.

NORTH GREEN HURTH.—James Polglase, October 8: The vein in the adit level south is smaller now than for some time past. The hazle is dipping, which may indicate a change. The vein in the adit level east, on No. 1 vein, is altogether in hazle and a very promising appearance.

PAR TIN.—Thomas Parkyn, October 15: I am pleased to inform you that excellent progress is being made in cutting plat at the adit, and all arrangements made for sinking the engine shaft below the adit. This I shall push on as fast as possible, and I think we shall be able to get the shaft sunk 7 or 8 fms. without a lift of pumps before the engine is set to work. You will see that this is most important, as when the engine is set to work we should be near the 10, when stopes will be opened immediately, and the stamps set to work and large returns and good profits must be realised. The rich lode we have driven on at the adit for the 150 fms., and what we have found in the winze below the adit warrants this opinion. The masons are busy in building the engine house, loadings, &c., and the stone carriers are keeping them well supplied with splendid granite rocks. I am pleased to say that everything at the surface is in a satisfactory state.

PATTERSYKE AND CLARGILL HEAD.—John Peart, October 10: The sump in low level is now down 11 fms. 3 ft., being 2½ fms. into the Tyne bottom limestone on the thrown up side; there is part broken stuff in the sump caused by the influence of the vein, and a little mineral in one corner, but nothing worth notice. The main part is still laying off. We have arranged to sink the sump other 3 yards if the water continues to go, and then make a cross cut to the west cheek from the bottom of sump, and this I expect will prove the vein about the middle of the limestone on the thrown down side.

PRINCE ROYAL.—S. Bennetts, October 14: During the past month the clearing of the No. 1 adit has been completed, and the cross cut driven north towards the Baldhu lode about 3 fathoms. In the No. 2 adit the western adit shaft has been cleared, secured, and put in order for drawing purposes, and the west end further extended on the Baldhu lode 2 fathoms; the lode here is 4 ft. wide, and tinny throughout, and worth about 4*l*. per fathom. Considering the depth of this end, being some 18 or 20 fathoms from surface, I think the lode is of a highly promising kind, and well worthy of development.

PRINCE OF WALES.—S. Roberts, October 14: The main lode in the 115 fm. level east is 6 feet wide, and worth 6*l*. per fathom for tin, and appears to be improving both in character and value. In the 115 east on the new lode there is a change in both the lode and ground since last week. The flookan, which was in two parts, has come together again, and appears to be squeezed. The tin bearing part of the lode, which is 3 ft. wide, is now on the hanging-side; it produces low quality stamping work. In the 115 west on this lode there is no change worthy of notice since last week. In the 102 east the lode is 5 ft. wide, composed of spar, peach, copper, wolfram, and tin, and from assays which I have very carefully made, is most valuable for tin, for which it is worth 7*l*. per fathom. The wolfram is giving place to tin. We shall resume the sink of the engine shaft the latter part of the week.

PRINCE OF WALES.—S. Roberts, October 15: The main lode in the 115 east is very large. We are carrying the level 6 ft. wide, and leaving lode each side; we do not know how large the lode is, but it produces tin the whole width carried, and I have a strong opinion that when it contracts to its usual size we shall find it a good lode. We commenced clearing the 102 east end to-day, and I shall put the shaftmen to prepare for sinking shaft on Monday.

ROMAN GRAVELS.—Arthur Waters and Son, October 13: The 125 going north shows indications of being near the junction of Roman lode with the east lode, and the water may be cut down any day, after which a winze will be sunk in the 110 fm. level, on the junction, where there is a good bunch of ore. The lode in the 125 forebreast is worth about 25 cwts. per fathom. The 125, south of new engine shaft, is in a lode 3½ ft. wide, worth 2 tons per fathom. We are going forward here at about 5½ fms. a month, with rock-drill. The 110 south is worth about 3½ tons per fathom. The rise in this level behind the end is worth 3 tons per fathom. We are carrying the rise 3 fms. long, and using the rock-drill, by four men. The 95 south shows three divisions of lode in the end, but we think of cutting into the footwall shortly, to prove the big vein, which is standing in that direction, which is productive in the stopes above the 65, 50, and 40. The present 95 end is yielding good stones of ore. The 80 south is without change since last week. The 17 stopes now in hand throughout the mine are worth together 32 to 34 tons per fathom. Our sale of 100 tons of lead ore to-day realised 767*l*. 10s.

RUSSELL UNITED.—John Bray, October 15: The lode in the 57 fm. level, west of cross-cut, is 4 ft. wide, with a leader part south on the lode, worth 1 ton of black copper ore per fathom. Last night we cut more water coming from the lode, which is a good indication. The lode in the 57 east is just the same as when last reported. In the deep adit level north, on the cross course, we have cut more water, and the ground is thickly spotted with copper and tin. I believe we are near the lode. The lode in the stopes above the back of this level is producing good tin work for 6 ft. wide. We shall have about 70 tons of tin whits for sale by the end of next week.

SOUTH CONDURROW.—William Rich, William Williams, H. King, October 14: There is no alteration to notice in the ends west of Marshall's since our last report. The 40 end, east of engine-shaft, yields a little tin. The stope in the back is worth 12*l*. per fathom. Three stopes in the back of the 50 are worth 8*l*., 10*l*., and 10*l*. per fathom respectively. The 50 end east is worth 7*l*. per fathom. The 60 end east is worth 8*l*. per fathom. The stope behind the end is worth 10*l*. per fathom. The 70 end east is worth 8*l*. per fathom. The stope behind the end is worth 11*l*. per fathom. The 80 end east is worth 8*l*. per fathom. Two stopes in the back are worth 9*l*. per fathom each. The 81 end, west of Plantation shaft, is worth 7*l*. per fathom. The 93, east of King's, is worth 10*l* per fathom.

SOUTH DARREN.—John Mitchell, October 15: The water continued to rise in the bottom until Saturday last, when there was fully 4 ft. in the 130 fm. level; it is now forking a little. To-day there is 2 ft. only. The drawing has been at a standstill, so we have been short of orestuff for the crusher, but we have been clearing the slime pits and dressing as much of the slimes and skimpings as possible. To-morrow we shall draw some orestuff we have in the 120, and we expect to be able to draw from the 130 by the beginning of the week, when we shall push on the work as fast as possible. There is no change to report in the stopes since last week. We have commenced carrying down copper ore to the stores at Aberystwith. The 25 tons of silver-lead ore sold on the 9th instant realised 305*l*.

STANDARD.—W. H. Borlase, October 15: The lode in the 45 fm. level south has fallen off in value since my report of last week, through a soft shale having come into the lode on the footwall side, causing the lead-bearing part to change its course. There is a nice branch of lead and blende, about 6 in. wide, in the bottom of the end, which I think will improve when the lode is in its proper course. The 23, south of junction, and north of the new shaft, has further improved, the lode now producing 15 cwts. of lead per fathom. The new winze on the east and west lode, east of the engine-shaft, is without change to notice. We are again in fork below the 45 fm. level, and dressing resumed.

WEST CARADON.—N. Richards, October 14: No. 5 lode east at the 38 will yield fully 2 tons of good copper ore per fathom.

WEST GODOLPHIN.—F. Hodge, October 13: After carefully inspecting the mine all through to-day we can see no change calling for remark. In all our points of operation fair progress is being made, and the machinery all throughout working satisfactorily.

WEST POLBREEN.—William Vivian, October 15: The work in the engine shaft is being pushed on with all speed. The building of the engine house is not progressing as fast as I could wish, owing to the wet weather during the last fortnight.

WHEAL BASSET.—W. C. Trevena, October 12: Setting Report: The 190 fm. level cross cut is being driven south of Lyle's engine shaft by nine men, at 12*l*. per fathom, to intersect the great flat lode, which may be daily expected, as we have been driving during the past week through the capels of the lode. The 180 fm. level rise west of shaft is worth for tin 10*l*. per fathom, and rising by nine men with a machine, at 7*l*. per fm. The 170 is being driven west of cross cut by two men, at 7*l*. 10s. per fathom, where the lode is promising to improve, and worth for tin 10*l*. per fathom. A stope working behind this end by six men, at 5s. 9d. per ton, is also worth for tin 10*l*. per fathom. The 160 fm. level west of cross cut is being driven south through the lode by six men, at 7*l*. per fm., where the lode is worth for tin 10*l*. per fathom. A stope in the back is worth for tin 12*l*. per fathom, and stoping by eight men, at 4s. 6d. per ton. A stope in the bottom east of winze is worth for tin 10*l*. per fathom, and stoping by eight men, at 5s. 9d. per ton. The rise in the 137 fm. level west of cross cut is worth for tin 15*l*. per fathom, and rising by six men and four boys with a machine, at 8*l*. per fathom. We hope to communicate this rise in a few days with the 112 winze. A stope in the back of the 137 is working by nine men, at 6s. 3d. per ton, which is worth for tin 10*l*. per fathom. In the 112 fm. level west of cross cut we have set to drive north through the lode by six men, at 8*l*. per fm., to see if there is any better part standing in this direction than where we have been driving upon. A stope in the bottom east and west of winze is working by 18 men, at 6s. per ton, in a lode worth for tin 20*l*. per fathom. No. 2 stope in the bottom is worth for tin 12*l*. per fathom, and stamping by eight men, at 5s. 6d. per ton. A rise in the back is worth for tin 10*l*. per fathom, and rising by nine men, at 6*l*. per fathom and 5s. per ton. No. 2 rise is worth for tin 12*l*. per fathom, and rising by 10 men, at 5*l*. per fathom and 4s. 6d. per ton for the stuff. The 112 fm. level west of cross cut is driving by two men, at 5*l*. per fm. and 4s. per ton, where the lode is worth for tin 8*l*. per fathom. There are 23 pitches working throughout the mine by 58 tributers, on tributes varying from 9s. to 13s. 4d. in 1*l*., on a standard of 45*l*. per ton for tin.

WHEAL CASTLE.—John Boyns, October 10: The cross cut in the 30 fathom level south is being driven by four men and boy. The ground is rather better for breaking. The 75 fathom level north is being driven by two men, and the ground and lode are much the same. The cross cut east of the adit level south is being driven by one man and boy. We have five men and boy breaking iron [illegible], &c.

WHEAL GRENVILLE.—T. Hodge, October 14: I have nothing new to report this week: the bargains continue to look very well, the valuations of which are fully up to any former period.

WHEAL CREBOR.—Henry Phillips, P. D. Holman, October 13: The lode in the 155, driving west of new shaft, has a very strong and masterly appearance, containing capel, arsenical mundic, and good stones of copper ore. The lode in the stope, east of winze, sunk in the bottom of the 144, west of new shaft, will yield 12 tons of copper ore and 3 tons of mundic per fathom. We are still continuing the drivage of the 144 west by the side of the lode. No. 1 stope, in back of this level, will yield 4 tons of copper ore and 2 tons of mundic per fm. No 2 will yield 6 tons of copper ore and 2 tons of mundic per fathom. No. 3, east of winze, will yield 10 tons of copper ore and 2 tons of mundic per fathom. No. 4, in back of said level, east of winze, and west of new shaft, 6 tons of good copper ore and 1 ton of mundic per fathom. The stope east of winze, sunk in the bottom of the 132, east of new shaft, will yield 8 tons of copper ore and 2 tons of mundic per per fathom. The stope, west of said winze, will yield 4 tons of copper ore and 3 tons of mundic per fathom. The stope in the back of this level will yield 5 tons of copper ore and 2 tons of mundic per fathom. The stope west of winze, sunk in the bottom of the 48, east of new shaft, will yield 2 tons of copper ore and 2 tons of mundic per fathom. The stope in the back of the 48, east of new shaft, will yield 3 tons of copper ore and 2 tons of mundic per fathom. All other points are without change.

WHEAL METAL AND FLOW.—Wm. Argall, S. P. Curtis, October 14: The Metal lode is producing a little more mundic, and the lode altogether is of a stronger nature, and congenial for the production of mineral. We have put to work 20 dead frames, and in the coming week we shall start 20 more. In the latter part of next week the eight heads of steam-stamps will go to work. We are pushing on all the dressing appliances as fast as possible, but this will take time.

YEOLAND CONSOLS.—J. Beare, October 12: During the past week ending the 10th inst. the main adit level has been driven a distance of 3 fms., and produces good paying stuff for the stamps. The stopes are also in work, and now that we have an abundant supply of water, and can keep the stamps and machinery in full work day and night, we anticipate monthly sales of a satisfactory nature, both in quantity and quality. The last parcel, sold on the 2nd inst., fetched its usual good price—just under 50*l*. per ton. Since the completion of the new tram lines in the adit the traming of the stuff to the stamps has been set at a considerable reduction upon that hitherto paid. All the machinery is working without a hitch.

FOREIGN MINES.

ALAMILLOS.—October 7: The lode in the 20 driving west of San Martin's shaft is small and compact, yielding ½ ton per fathom. In the 20 driving west of Santa Agneda's shaft a good length of valuable lode has been opened up; it, however, is not so good as it was, its present worth being 1 ton per fathom. The men are cross cutting north in the 130 driving east of Taylor's engine shaft, but have not yet reached the lode. The lode in the 130 driving west of Taylor's engine shaft is small and unproductive. In the 80 driving east of San Victor's shaft the lode is large, open, and promising, with good stones of ore. In the 95 driving in the same direction a valuable piece of lode was opened up in the past month, but it has declined to 1 ton in the past few days. The lode in the 95 driving west of San Victor's shaft is large, strong, and productive, yielding 3 tons per fathom. Parra's winze is being sunk below the 10 in paying ground, valued at 1 ton per fathom. The sinking of San Felipe's shaft below the 60 has been commenced; the lode is of a promising appearance, producing 1 ton of ore per fathom. The weekly returns of ore were kept up very regularly during the past month, and the stopes are yielding moderately well at present. The works at suface are going on very regularly, and the machinery is in good condition. We estimate the raisings for October—five weeks—at 250 tons. The tributers returned 126 tons of ore in the past month.

ALMADA AND TIRITO.—John Clark, September, 18: Cruz Verde: Mine is looking well at present, since last report we have started the north drift in bottom of winze, and the lode looks strong, and has a good appearance giving green ore. Providencia is also looking well, and is giving some good green and black ore.—Virgen: We are getting along well with the point referred to in my last report. We are obtaining some more of the old workings, but we have to rise more yet. This point is giving stones of green ore, but we do not expect to

get much from this point before we rise a little more, as we are on the south end of the Virgen. In other parts of the mine there is no change to note, everything is in good shape.

BARANCANNES.—Joseph Garland, October 7: Report for September: I have to report good progress, and on the whole satisfactory results for the past month. The 34 north was driven 9·90 metres, and for the most part in a gradually improving and productive lode. Of the 5 ft. of lode carried about 2½ ft. is ore bearing, composed of equal proportions of quartz and killas well desseminated with copper pyrites and a little grey copper ore, yielding ¾ ton per fathom. We have a good lode all the way between the end and the old shaft in the 24, and we expect the lode in the bottom level to increase in value as we proceed. The 24 south was advanced 6·50 meters in a lode composed of soft killas and flookan, and excepting occasional spots entirely without ore. The rise in the 34 was extended 6·70 metres, and to within about 2½ metres of the 24; we expect to hole to that level early in the present month. As the rise is being put up by the side of the lode, its size and value has not been determined except in one instance during the month when the leader was found to be 18 in. wide of rich ore, valued at 2 tons per fathom. The lode here is found to have changed its underlie, and is now on the footwall side, almost vertical. The winze in the 24 was sunk 6·60 metres, making the total depth 13 metres (about 7 fathoms). At a depth of 3½ fathoms the lode had increased in size to 4½ ft., at the present depth it is 6½ ft. wide, 6 ft. of which is a mass of jointy loose quartz with a good proportion of ore throughout, containing 24 per cent. of marketable ore, referred to, and at the particular spot cut through by way of trial should yield about 4 tons of clean dressed ore. This looks promising for deeper levels. The winze is now off the lode, as the lode has bent back towards the footwall, and is now like the lode in the rise, going down almost vertically. In No. 4 stope in the back of the 24, and near the 13 fathom level, the lode is 6 in. in width, yielding about ¼ ton per fathom. In No. 6 stope south of the winze in the bottom of the 24, the lode is 3 to 4 ft. wide, chiefly quartz matrix, and valued at 1½ ton per fathom. Our prospects have considerably improved during the past month. The ore dressed for the month is estimated at 10 tons of 20 per cent., and we expect to have an equal quantity for October. The recent addition of a flywheel to the pumping and winding engine has very greatly improved the action of the engine and pitwork which now work with a regularity and steadiness never before attained. We are now approaching the end of the unhealthy season, but the intermittent fever amongst the native workpeople still interferes with the regularity of the work.

BUENA VENTURA.—October 7: In the 30 driving east of Contrabando shaft the lode has changed unfavourably, and is not now producing ore enough to value. The lode in the 30 driving west of Contrabando shaft has also become unproductive. The sinking of Contrabando shaft below the 30 has been retarded by a slight accident to the small engine; this is again restored. The lode yields ¼ ton per fathom. The lode in the Emma engine shaft sinking below the 10 has declined in value to 1 ton in a fathom. We are now fixing a plunger at the first level, which will be completed in a day or two, when sinking under greater advantages than hitherto will be resumed. In No. 14 winze the lode is very small; the sinking below the 20 has been hindered by the stoppage of the engine. The works at surface are going on steadily, and the machinery is again in good working order. The tributers have not done much in the past month. The raisings for September amounted to 22 tons of ore.

CALIFORNIA GOLD.—Manager, September 23: Statement of output for August gives returns on 256·92 tons of milling ore and 59·49 tons of smelting ore from the California proper, amounting to $5045·03, and from the Hidden Treasure 149·84 tons of milling and 45·42 tons of smelting ore, of a value of $5435·79. In the aggregate we have put out 510·67 tons, realising $10,480·82. These results are largely due to the excellent returns from the new ore body in the bottom of the 1500 west, which figures for $531·5·31, or more than half of the whole. It is to be noted that the ore body is almost entirely within the end lines of the Hidden Treasure, and deeper; it will be more so still, if we are to judge from the dip it is now taking; 6·58 tons of Hidden Treasure ore comprised in the above returns netted $201·75 per ton.

DEVALA MOYAR.—J. Williams, September 21: During the past fortnight Harewood shaft has been sunk 16 ft. Salomon's reef 600 level; driven 9 ft.; 500 level, 12½ ft.; 400 level, 15 ft.; 300 level, 14 ft.; 200 level, 12 ft.; rise in the back of the 300 level, 15 ft.: total, 193½ ft. All this work has been performed by contract, and has needed but little supervision, so that the Europeans have been able to give nearly all their time to the construction of the tramway of which 2200 ft. have now been laid. Harewood shaft is now 60 ft. below the surface, but we have not yet touched the bottom of the old workings. The reef does not appear to diminish in size, and from the softer portions samples are taken frequently and washed by the Korumber, and in every case give a show of gold.

FORTUNA.—October 7: Canada Incosa: The lode in the 90, west of San Pedro's shaft, is strong and regular, producing good stones of ore, worth ½ ton per fm. In the 120, driving east of O'Shea's engine shaft, the lode is small, and the granite harder than it was. The lode in the 110, driving west of Lowndes' shaft, is also small; our principal object is to communicate with these two drivings. In the 110, driving east of Lowndes' shfat, the lode is improving, and yields good stones of ore. Assis' winze, sinking below the 100, is holed to the 110, which has greatly improved the ventilation. John's winze is being sunk below the 80 in a very promising lode, yielding ¾ ton per fathom. Bruno's winze, sinking below the 100 fm. level, is situated east of Lowndes' shaft and in advance of the 110 fathom level; its present worth is ¼ ton per fathom.—Los Salidos: The lode in the 175, driving east of Taylor's engine shaft, is very regular, but quite unproductive. The lode in the 160, driving in the same direction, has fmproved to 3 tons per fathom in the past few days. In the 145, driving east of Taylor's engine shaft, the lode is compact and firm, opening up valuable ore ground, and yielding 2 tons per fathom. The lode in the 92 driving west of Palgrave's shaft, is small, with occasional stones of ore, but not enough to value. In the 92, driving east of Palgrave's shaft, the lode continues small, barely opening up paying ground, its present worth being ½ ton per fathom. The lode in Parra's winze, sinking below the 80, is compact and regular, with good stones of ore, valued at ¼ ton per fathom. Esteban's winze is sinking below the 130, in a very rich lode; producing 3 tons per fathom. The usual quantity of ore was delivered into the stores in the past month, during which the stopes did not undergo any change of importance. The surface work is kept on very steadily, and the machinery is in good working order. We estimate the raisings for October at 350 tons. The tributers returned 111·4 tons of ore in the past month.—San Anton: The lode in the 40, driving east of El Tesoro engine shaft is large and strong, but is not yielding enough ore to value. In the 40 driving west of El Tesoro engine-shaft the lode is also large and strong, with good stones of ore. Nothing of value has yet been found on the west side of the cross course in the 30 driving west of El Tesoro engine-shaft. Emilio's winze is going down below the 30 in a productive lode yielding 1 ton in a fathom. The lode in the Gomez winze, sinking below the 30, is very large and strong, but without sufficient ore to value. The usual quantity of ore was delivered to the Fortuna Smelting Works in the past month, and the stopes are yielding moderately at present. The surface works are going on very steadily, and the engines are in good condition. We estimate the raisings for October at 75 tons.

JAVALI.—G. E. Chambers, August 15: I beg to hand you the following report for the past month's working: Mine: In Pim's tunnel 2 varas were driven for stoping. The level to west from Seeman's shaft was continued 6½ varas. The Esperanza level was driven 1½ vara. The quartz supply came from the following places:—Seeman's stope and level, 561 tons; San Pedro, No. 1, 112 tons; San Pedro, No. 2, 77 tons; Laken, 133 tons; East Sinking, 270 tons; West sinking, 276 tons; Edwards's shaft stope, 63 tons; Dolores, 81 tons; Nispero, No. 1, 107 tons; Nispero, No. 3, 10 tons; Concepcion Manto, 215 tons. I regret to say the average yield per ton showed a decrease of nearly 1 dwt.; this is chiefly due to our having encountered more pyrites than usual.—Mills—La Fé: The 30 stamps worked 24 days, crushing 1519 tons, which yielded 346½ ozs.—an average of 4 dwts. 13½ grs. per ton. With the exception of a stoppage for cleaning, &c., the turbine worked satisfactorily.—Esperanza: The 12 stamps worked 24 days, crushing 475 tons, which yielded 104¼ ozs. of gold, an average of 4 dwts. 9 grs. per ton.—La Caridad: The 26 stamps worked 23 days, and yielded 29½ ozs. of gold. The total remittance consists of 480¼ ozs. of gold, resulting from the crushing of 1994 tons, making an average of 4 dwts. 19½ grs.—Buddles: By constructing a concentrating tank I was able to make the buddles self-feeding, and it has been at work since the middle of July. I put the heads into the arrastras, but I regret to say with no good result, as the yield from the arrastra was less than in former months. I am sure nothing can be obtained out of this sand, unless it is by calcination. I shall keep the buddle at work, but pile up the result for future manipulation.—Receipts and Expenditure: The expenditure was 1101l.; remittance is valued at 1200l.

KOHINOOR AND DONALDSON CONSOLIDATED.—Manager, September 24: The output for August consists of the following:—Donaldson, 492·35 tons; yield in bullion, 152·90 ozs., $2446·40; concentrates, 8·99; 10·21 tons smelting ore, $391·07; total, $3236·47.—Champion: 43·79 tons milling, yield 11·39 ozs., $182·24; concentrates 8·35 48; 12·67 tons smelting ore, $292·22; total, $509·94. The chief interest in these returns lies in the fact that we have arrived at a fairly satisfactory state of things at the Donaldson. There is an improvement in the grade of the ore, and we are getting out larger quantities at smaller cost. We are in position now to keep 25 stamps running steadily from this mine, which will no longer be a drawback to the Champion, but in connection with that mine will make a profit.

LINARES.—October 7: Pozo Ancho Mine: The lode in the 135 driving east of Warne's cross cut is still very wide, but not so productive as it was, its present worth being ¾ ton per fathom. In the 130 driving west of Warne's shaft the lode has further declined to ¼ ton per fathom. The lode in the 115 driving in the same direction continues unproductive. The men are making good progress in the 15b driving south of Peill's engine-shaft. In the 155 driving west of Peill's engine-shaft the lode is very open, yielding 1 ton in a fathom, and inexpensive for opening up. The lode in the 155 driving east of Peill's engine-shaft has a promising appearance, and shows signs of improvement, its present value being ½ ton in a fm. In the 135 driving east of Peill's engine-shaft the lode is split into several small branches worth ½ ton in a fathom. The lode in the 120 driving in the same direction continues small and unproductive. The usual quantity of ore was delivered into the stores in the past month, during which the stopes did not undergo any change of importance. The ordinary surface work is going on very steadily, and the machinery is in good condition. We estimate the raisings for October at 250 tons.—Quinientos: The lode in the 115 driving west of Taylor's engine-shaft continues small, and without sufficient ore to value. In the 115 driving east of Taylor's engine-shaft the lode is smaller, and has declined in value to 1 ton in a fathom. The lode in the 100 driving east of Taylor's engine-shaft is strong, yielding good stones of ore worth ½ ton per fathom. In the 90 driving in the same direction the lode has improved to ½ ton in a fathom, and is of a promising appearance. We estimate the raisings for October, five weeks, at 150 tons.

MYSORE GOLD.—B. D. Plummer, September 22: Mining Operations: In the places generally satisfactory progress has been made.—Taylor's Shaft, 296, South End: The lode is 4 ft. wide, worth 3 ozs. 6 dwts. 23 grs. per ton. The 296, north end, the lode is 7 ft. wide, worth 2 ozs. 9 dwt. per ton. The 236, south of Taylor's shaft, winze and drift in bottom of the level, the lode is 6 ft. wide, worth 3 ozs. 11 dwts. 21 grs. per ton of quartz. Stope in back of the 236 south, the lode is 3 ft. wide, worth 5 ozs. 4 dwts. 13 grs. of fine gold per ton. Bottom of the 236, north of shaft, 13 Italians are working; the lode is 5 ft. wide, worth 6 ozs. 12 dwts. 16 grs. per ton. The 173, No. 4 winze, on east lode, the lode is 3 ft. wide, worth 19 dwts. 14 grs. per ton of ore. Plummer shaft is passing through an arch of ground left by the old workers; the lode is 1 ft. wide; assay value, 11 dwts. 10 grs. per ton. The lode in the foregoing workings is strong, healthy, and good looking. All the other places in the mine are the same as last reported. Surface work generally is progressing in the usual satisfactory way.

NUNDYDROOG GOLD.—B. D. Plummer, September 22: Webb's Shaft: Two Europeans and 22 coolies are employed sinking this shaft. The progress is a little better than before the pump was started. The rock is hard dolerite, but still the progress is small, 2 ft. 5 in. was cut in the past week. The depth below the 95 is 43 ft. 5 in. I should here mention that the underlie shaft was started from surface on lower ground than Taylor's shaft, and at this place it does not represent quite 95 ft.; the total depth, however, from surface to the bottom of Webb's shaft is now 139 ft. 9 in. After sinking about 20 ft. deeper we intend to drive out levels, and as extensive old workings have been found 7 or 8 fms. south of Webb's shaft in the 95, the driving of deeper levels will be an interesting matter. At present there is no lode in the shaft, the cross-course, however, appears to be getting smaller, and within the last few days a good footwall has shown itself in the bottom of the shaft.—Taylor's Shaft: The work in connection with making it good from the point of contact with the downright shaft progresses very well. One Englishman and 30 coolies are employed; it has to be close timbered, they are making satisfactory progress, and doing a good job. Before suspending operations at this mine we discovered a cross-course in the 95 ft. level, but we had never satisfied ourselves in regard to the vein north of it, and just before operations were suspended a cross-cut was started from the forehead north of the shaft, to the east we discovered nothing. About a week ago a gang of coolies were set to work to drive the cross-cut further; after driving about 3 ft. we tapped water and veinstuff. It has not yet been sufficiently opened to say much about its appearance; the part we can see consists of small ribs of ferrugineous quartz and bands of light-coloured schist. Though it is not now of any commercial value, we look upon it as affording great assistance in the development of the mine in the deeper levels. We shall open out the 95 on it for some distance, it may perhaps improve even at that depth.—Surface Work: Everything at surface continues satisfactory.

RUBY AND DUNDERBERG CONSOLIDATED.—September 20: Dunderberg: There are 10 tributers at work, 17 tons ore shipped, no change to report.—Lord Byron: The north drift from the bottom of the shaft has been advanced 11 ft. during the week, total, 34 ft.; end is in favourable looking ground for ore. The stope at north end of No. 1 cave 100 ft. below the tunnel level is producing small quantities of good ore, work has been suspended for the present at the stope 60 ft. south of the shaft, 100 ft. below the tunnel level, in order to push the bottom level forward as fast as possible. There are 10 tributers at work, and 10 tons ore shipped during the week.—Home Ticket: The winze at the end of the bottom level continues in low grade ore and iron of no value. Progress this week 6 ft, total 66 ft. below the level. The ore in winze below the 300 ft. level continues from 3 to 4 ft in width, and is improving in quality. Samples taken from time to time being from $30 to $106, the last sample all silver. Progress this week 6 ft.; total, 30 ft. below the 300 ft. level, estimated quantity of ore extracted 30 tons.

— Telegram, Eureka, October 13: 5 tons tribute ore shipped; 21 tons tribute are smelted, producing to the company $89; received for ore shipped on company's account $670.

ST. JOHN DEL REY MINING COMPANY (Limited). — Advices received 14th October, 1885, ex Tagus, dated Morro Velho, 19th September:—

GENERAL OPERATIONS.

GOLD PRODUCE FOR THE MONTH OF AUGUST, 1885.—The gold produce for the above period amounts to 22,143·2 oitts., equal to 2552·7506 czs. troy. It has been derived as follows:—

	Oits.	Tons.	Oits. per ton.
Morro Velho stamps	19,430·9 from	5016 =	3·873
Re-treatment, &c.	2,712·3 ,,	— =	·541
Total	22,143·2 ,,	5016 =	4·414

Although the quantity of mineral treated is less than was stamped during the preceeding month by 212 tons, the gross produce is higher by 2851·6 oits. This is owing to the increased yield per ton—4·414 oits. against 3·696 oits. for July.

COST AND PROFIT.

Produce	22,143·2 oits.		
Less loss in melting	154·2 ,,		
	21,989·0 oits., at 7s. 9d. per oit.	£8520	14 9
Cost. Rs. 84,386 8175		6438	9 9
Profit for the month		£2082	5 0

MINE.—Mineral raised from the mine ..... 5099 tons.
Mineral quarried per borer per diem ..... 2·52 ,,
Average attendance of borers daily ..... 77·68
Average attendance of natives daily ..... 283·46

SUMP.—The alteration mentioned in the last monthly report respecting this part of the lode still continues. The good mineral in the south side has now extended much further south than hitherto, which has had the effect of increasing the width of the sump about 4 or 5 ft.

The sinking during the month has been somewhat less, owing to the increase of stoping area.

NO. 1 STOPE.—Little change has taken place in the nature of this stope. We are, however, daily expecting to intersect the valuable mineral met with in April last, whilst driving back the No. 2 stope, a little west of the position now held by the No. 1.

THE NO. 2 STOPE has slightly improved in appearance more lode matter being visible. The admixture of quartz, however, causes its gold-bearing yield to be comparatively low. The alteration in the position of the "Indent" has considerably affected the nature of the lode, and we watch with interest the advancement of this stope.

NO. 3 STOPE.—The improved condition of this stope continued until the middle of August, when the layers of pyritic mineral were replaced by quartz previous to its reaching the slide.

EASTERN RESERVES.—The stone that is being removed from the back of the shaft preparatory to commencing operations on a new stope has assumed larger dimensions than was at first anticipated; however, enough of it has been taken away to admit of stoping, and as soon as the open space is blocked up, and the roof secured, stoping operations will be commenced.

The lode in the eastern stope maintains its size, but the mineralised portion is rather more mixed.

GOLD EXTRACTED TO DATE.—The produce for the first division of September, a period of 11 days, amounts to 5949·3 oits., equal to 685·8574 ozs. troy. It has been derived as follows:—

	Oits.	Tons.	Oits. per ton.
Morro Velho stamps	4971·5 from	1919	= 2·590
Retreatment	977·8 ,,	—	= 0·501
Total	5949·3 ,,	1919	= 3·100

MINE.—Return of duty for 13 working days:—
Mineral raised from the mine ..... 2385 tons.
Mineral quarried per borer per diem ..... 2·41 ,,
Average attendance of borers daily ..... 72·92
Average attendance of natives daily ..... 210·3

CUIABA.

MINE.—In the Fonte Grande sections at the deep adit horizon a great improvement in the nature and value of the mineral has taken place. In appearance the mineral is far more like that found in the western part of Morro Velho, the pyritic formation being fine, and well disseminated throughout the stone.

FONTE GRANDE SECTION.—The eastern drift at the deep adit horizon after running a distance of over 10 fms. in a poor lode, at last showed signs of improvement. Towards the end of the month a line of more highly mineralised stone was met with, which, on assay, proved to be worth 1·6·9 oits. per ton. This improvement has been more than maintained, and assay from stone sampled on the 5th inst. gives a return of 3·542 oits. per ton. The lode is still improving in look, is strong, of a lighter colour, and the pyritic formation is far more regularly distributed throughout the stone than it has been at higher horizons.

The western drift at the deep adit horizon on the Canto Gallo section has been turned south, and a great change has taken place in the nature of the ground. This alteration leads us to hope that the lode will also be intersected at this point during the present month. In other parts of the mine no special change worthy of note has occurred.

REDUCTION.—During the first 15 days of the current month but little improvement has taken place in the nature of the mineral treated; every care has been taken to select the more highly mineralised portion

The tonnage for the 15 days is 700 tons, this is rather low, but the mineral is hard, and the water somewhat slack for driving both the mill and stonebreaker during the daytime.

COST AND PRODUCE.

Cost on working account		£	744 13 11
Cost on capital account—			
Exploration	£170 5 11		
Rego	35 14 2 =	206	0 1
		£	950 14 0
Less value of produce, 192·8694 ozs. troy, or 1672·1 oits., at 8s. 1d. per oit.		675	16 1
		£	274 17 11

TELEGRAMS RECEIVED.—On September 23, dated Rio 22nd:—Produce 11 days, first division of September, 60·0 oits.; yield, 3·1 oits. per ton. Profit for the month of August, 2·00l.

Cuiaba: Expenditure beyond produce during August, 250l.

On September 30, dated Rio 29:—Produce for 10 days, second division of September, 5250 oits.; yield, 3·4 oits. per ton.

On October 12, dated Rio 12:—Produce for the month of September, 15,500 oits.; yield, 3·2 oits. per ton.

Stamped at Cuiaba: 1500 tons; yield, 1·3 oit. per ton.

GAS SHARES.—The principal business in these shares, according to this evening's report of Messrs. W. L. WEBB and Co., of the Stock Exchange and Finch-lane has been:—Bahia, 25½ to 25⅝; Bombay New, 5; British, 42¼ to 43¼; Buenos Ayres, 13¼ to 14; Bromley Consumers, Seven per cent., 14; Continential Union, 41⅛; European, 22¼ to 22⅝; Gas Light, A, 235 to 238; ditto J, 248 to 249½; ditto, Four per Cent. Debentures, 109 to 110¼; ditto, Four and a half per Cent., 118; ditto, Six per Cent. Debentures, 157⅜; Imperial Continental, 215 to 216½; Monte Video, 18 to 18¾; Metropolitan of Melbourne Five per Cent., 107⅞; Oriental, 9; Para, 4; Rio de Janeiro, 23¾ to 24½. Gas stocks steady, little doing.

INSURANCE SHARES have, according to this evening's report of Messrs. W. L. WEBB and Co., of the Stock Exchange and Finch-lane, been dealt in as follows:—Alliance British and Foreign, 36½ to 37½; City Marine, 1¼ to 1⅜; Continental Union, 15¼ to 15½; Crown, 50l. paid, 74 to 74½; Fire, ¾; Guardian, 60¼; Home and Colonial, ⅜; Imperial Fire, 151 to 152½; Indemnity Marine, 14 to 14½; Liverpool, London, and Globe, 26⅝ to 26¾; ditto, 1l. paid, 25; London, 44¼ to 44½; Merchants Marine, 1¼ to 1 7/16; Marine, 28 to 28½; North British and Metropolitan, 31½ to 32¼; Phœnix, 205; Rock, 7¼ to 7 5/16; Sun, 101 to 101½; Universal Marine, 8 5/16. Insurances little doing, old companies firmer.

THE Rio Tinto Company (Limited) invite holders of Shares to Bearer to present Coupon No. 14 for payment on the 3rd proximo.

LEAD MINING.

It is to be hoped that all the Chambers of Commerce will not show the same sublime disregard of the causes of the present wide-spread depression in all industries as the Chamber whose astounding reply to the enquiries of his Commission was read to the meeting of working men by Lord Iddesleigh at Aberdeen a few days since. These causes may in some cases be complex: depending partly on over-production, partly on faults of our own manufacturers—their want of energy in maintaining their hold upon markets, or the loss of these markets by bad workmanship; partly on the natural timidity of capitalists generated by past experience under a Gladstone Government, and by dread of what may happen to us at home and abroad if the power to work out the quack nostrums of Mr. Chamberlain and his party should be thrown by the new electorate into hands which show so much readiness to deal liberally with other people's property. But there are industries where the problem presents no such difficulties. I will call attention to one that has come immediately under my own notice—that of lead mining. Formerly England mainly supplied all the lead she wanted from her own mines, and was besides a considerable exporter. Since 1870 prices have been steadily falling, till in 1880 they reached a point so low that one by one the lead mines of the kingdom have been shut up; and now there is scarcely one mine, if there is one, of those that are still open, that pays its way. What has been the result upon the mining population? About 30,000 able and intelligent men thrown out of work, and they and their families, making an average of at least 60,000 more, cast adrift upon the world. Consider what this means, not only in direct suffering to the class they belong to, but to the owners of the houses in which they lived, the tradesmen who depended on their custom, the capitalists whose money, vast in amount, was sunk in opening the mines and in the machinery for working them. Here, in short, is one of our important industries annihilated. Surely it would be well that the country, through Lord Iddesleigh's Commission, should learn whether this annihilation is due to the operation of natural or artificial causes. One main cause, if not the only one, is not far to seek. It is, that lead comes in duty free from Spain in such large quantities and at so low a price, that the English miner cannot compete, and has had to abandon the struggle for mere existence. England wants for its own use as much lead as it ever did. It is not, therefore, due to any falling-off in the home demand that the home product has become virtually extinct. The importation of foreign lead has gone on increasing as mine after mine in this country has been shut up. Last year the trade returns show that we imported 109,000 tons, being an excess of 7300 tons over the total for 1883. And whence came the bulk of this large importation? From Spain, which sent us 86,200 tons, an increase of 5300 over the previous year. This was unmanufactured lead; but the importation of manufactured lead is also increasing rapidly; 82 per cent. of it now comes from Germany, and the quantity sent to us from that country has within the last year been more than doubled. The net loss to England in the closing of her mines is thus easily computed. What is the gain to her as a set-off against this loss? Ask those who have had to pay for white-lead, lead pipes, lead sheeting, or any other form of manufactured lead, whether during the last five years they have had to pay an appreciably lower price for these commodities than when England was driven out of the market, and they will tell you No. Ask an English manufacturer of lead if he can send his goods into Spain, and he will tell you No, because he is met by a prohibitory tariff. Ask the manufacturer, indeed, of any of our fabrics as to his chances of a market with Spain, and he will give you the same answer. Free Trade, as we apply it, enables Spain to pauperise thousands of our industrious population. She laughs at our theory that Free Trade is to bring on the millennium; but she profits by it, keeping up her exclusive tariffs, while she takes from our labouring classes and gives to her own the money which, but for this one-sided Free Trade, would have kept alive, as centres of a busy and thriving population, what are now an aggregate of desolate homesteads and idle and rusting machinery. The facts above stated cannot be disputed. What is the legitimate deduction from them? Surely it is worth while to ascertain this. Doubtless there are other languishing industries which have much the same tale to tell, and which go to swell the aggregate of great and still spreading suffering which come daily under the eyes of those who, like myself, are brought into frequent contact with the employers of labour and those who depend upon them.—E. N., in *St. James's Gazette*.

THE engineers employed at the works of the Carron Iron Company Falkirk, struck work, on Monday, in consequence of notice having been posted up that no overtime would be paid in future unless the working hours exceeded 57 per week. The moulders in the same works also struck.

AT a mass meeting of chainmakers of the South Staffordshire district, held at Cradley Heath, on Monday, it was resolved to continue on strike at the factories where the employers refuse to concede the advance demanded. Work was resumed on Monday at several factories where the advance had been conceded.

GOLD AND SILVER.—Messrs. PIXLEY and ABELL write under date October 15:—Gold is in strong demand for the Continent, and arrivals of bars and foreign coin have been taken for export; the only gold sent into the Bank consists of sovereigns to the value of 138,000l., chiefly from Australia. On the other hand, bars and coin costing 208,000l. have been withdrawn. The Venetia has brought 105,38 l. from Melbourne. Nepaul has brought 33,940l. from China. Cathay has brought 20,400l. from Bombay. Tagus has brought 86,580l. from River Plate. Total, 246,300l.—Silver: With a steady rise in Indian exchanges since our last, and with the prospect of an order on Spanish Government account, the price of silver has advanced to 47½d. per ounce standard, at which the market closes firm. The Calcutta markets are closed till the 26th inst., owing to the Doorga Poojah holidays. The only arrivals during the week have been about 50,000l. from New York, and 800l. from South America. The P. and O. steamers takes 35,000l. to the East.—Mexican Dollars have fallen in price, with the lower rate at present ruling in Paris, and the unsold portion per French steamer realised 47 9/16d. per ounce on French Government account. The Lafayette brought 25,000l. from Vera Cruz, and we have received about 10,000l. from New York.—Exchange: The 20 lakhs of India Council Bills were allotted yesterday:—Bills on Calcutta Rs. 16,74,000, average rate, 1s. 6 18d; bills on Bombay, Rs. 2,98,000, average rate, 1s. 6·18d.; bills on Madras, Rs. 28,000, average rate, 1s. 6·23d. Tansfers on Bombay, Rs. 3,00,000, average rate, 1s. 6·21d. Tenders for Bills at 1s. 6 15/16d. receive 37 per cent., and for transfers at 1s. 6 7-32d., in full. Special allotments, 14th inst.—Bills on Calcutta, Rs, 42,000 at 1s. 6 7-32d. Bombay, Rs. 1,00,000 at 1s. 6 7-32d. Madras, Rs. 50,000 at 1s. 6 7 32d.: 15th inst., Calcutta, Rs. 3,00,000 at 1s 6 7-32d. Amount for tender is next week increased to 25 lakhs. The latest Exchanges from the East are:—From Bombay, 1s. 6 5-32d. per rupee: from Hongkong, 3s. 5¼d. per dollar; and from Shanghai, 4s. 8½d. per tael.—Quotations for Bullion: Bar gold, fine, 77s. 9½d. per oz. standard; bar gold, containing 20 dwts. silver, 77s. 11¼d. per oz. standard; bar silver, fine, 47½d. per oz. standard; bar silver, containing 5 grs. gold, 47⅞. per oz. standard; cake silver, 51½d. per oz.; Mexican dollars, 47 9/16 l. per ounce. Quicksilver, 6l. 2s. 6d. nominal; discount 3 per cent.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Oct. 6	Pierrefitte	50	£10 3 6	Quirk, Barton, and Co.
9	Minera	42	7 10 0	Mining Co. of Ireland.
—	ditto	40	7 10 0	ditto
—	ditto	5	7 10 6	Walker, Parker, & Co.
13	Foxdale	100	9 18 0	Adam Eyton.
—	Lisburne	20	8 10 6	ditto
—	ditto	20	8 10 6	Panther Lead Co.
—	East Darren	20	10 15 6	ditto
—	Cwmystwyth	7½	6 10 6	ditto
—	ditto	7½	6 10 6	Walker, Parker, & Co.
15	Roman Gravels	100	7 13 6	ditto
16	Great Holway	24	9 13 6	ditto

BLENDE.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Oct. 9	Minera	67	£ 3 10 3	—
—	ditto	75	3 17 9	—
—	ditto	65	3 16 9	—
—	ditto	60	3 15 9	—
—	ditto	—	3 10 9	—
—	ditto	60	3 10 9	—
—	ditto	53	3 4 0	Pascoe, Grenfell, & Co.
—	ditto		3 4 0	—
—	ditto	50	3 4 0	Dillwyn and Co.
—	ditto		3 4 0	Vivian and Sons.
—	ditto	23	3 1 6	Vivian and Sons.

BLACK TIN.

Date.	Mines.	Tons	c.	q.	lb.	Price per ton.	Purchasers.
Oct. 15	East Blue Hills	3	13	2	18	£50 10 0	Daubus and Co.
—	ditto	0	10	0	13	31 10 0	ditto

C. PASS AND SON, BRISTOL,
ARE BUYERS OF
LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS, ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c. and DROSS or ORES containing
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TREVAUNANCE AND WEST KITTY SHOULD BE BOUGHT AT ONCE.

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25 Bedford United, 7s 6d	50 Almada, 1s. paid, 3s. 9	100 Nacunal, 1s. 3d.
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50 Drakewalls, 2s. 6d.	50 Bratsberg, 7s. 6d	50 Nundydroog, 10s. 6d.
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50 Home Mines Tst. 13s	7s. 6d.	80 Organos, 8s.
20 Killifreth, 12s.	20 Chontales, 2s. 6d.	50 Orita, 20s.
20 Kitty St. Agnes, 12s 9	100 Colombian Hyd., 9s 6	100 Pestarena 1s. 3d.
20 Leadhills, 43s.,	100 Devala Moyar, 4s.	50 Potosi, New, 4s. 9d.
10 New Kitty, 17s.	200 Denver Gold, 4d.	10 Port Phillip, 1s. 6d.
20 New Wt. Caradon, 2s.	100 Eberhardt, 1s.	20 Panulcillo, £1 15s.
25 Phœnix United, 35s	3 El Callao, £49.	100 Ruby, 6s. 3d.
30 Polberro, 41s.	50 Frontino, 12s. 6d.	20 Richmond, £3 5s.
50 Prince of Wales 2s.	200 Gleurock, 7s. 3d.	25 Rio Tinto, £3 12s. 6d.
100 Parys Copper, 9d.	100 Gold Coast, 1s. 3d.	10 Schwab's Gully, £3 7 6
3 Roman Grav., £4.	50 Hoover Hill, 7s. 6d.	50 Silver Queen, off. w.
150 South Caradon, wtd.	200 Indian Consolidated,	105 Spitzkop, 7s. 6d.
10 So. Condurrow, £8¾.	5s.6d.	80 Tacquah, 1s. 9d.
20 South Darren, 8s. 6d.	10 Javali, 3s.	100 Tocopilla, 2s. 6d.
10 South Frances, £3⅜.	100 Kohinoor B, 2s. 3d.	11 Tolima A, £3.
10 Trevaunance, 49s.	100 La Plata, 5s. 3d.	10 Tolima B, £2.
20 Van, 27s. 6d.	130 Lisbon-Berlyn, 9d.	100 Transvaal Gold, 2s. 3d
10 West Kitty, £3 5s	15 La Trinadad, £3 17s 6	50 Tambracherry, 5s. 6d.
10 Wheal Basset, £6½.	20 Mason-Barry, £7 7s. 6	20 U. Mexican, £2 7s. 6d
25 Wheal Crebor, 15s. 6d	50 Montana, 46s.	100 Victoria Gold, 2s. 6d.
	20 Mysore Gold, 45s. 6d.	

*** S. James can buy or sell any of the above shares. Correspondence invited. Trustees, executors, and others will find their duties considerably lightened by submitting schedule of shares held to Mr. James, who will return the same by next post with market values attached.

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50 Akankoo, 2s. 3d.	25 Holywell District Ld.	50 Potosi, 4s. 9d.
Bratsberg, 6s. 3d.	50 Hoover Hill, 8s. 6d.	40 Prince of Wales.
100 Coed-y-Fedw.	100 Indian Consols, 4s. 6d	60 Ruby, 6s. 6d.
50 Colombian Hyd., 9s. 3	50 Kohinoor B, 2s. 6d.	10 Rio Tinto, £3 13s. 9d.
150 California Gold, 3s. 3d	40 La Plata, 4s. 6d.	13 Richmond, £3 7s. 6d.
60 Callao Bis, 5s.	La Trinadad, £3 18s 9	30 South Darren, 8s. 6d.
50 Chile Gold, 7s. 3d.	20 Montana, £2 6s. 3d.	10 Schwab's Gully, £3 6 3
100 Chontales, 2s. 3d.	20 Mysore Gold, 41s.	100 Transvaal, 2s.
10 Colorado, £2 7s. 6d.	200 Nouveau Monde, 2s	15 U. Mexican, £2 8s. 9d.
150 Don Pedro.	Nundydroog, 9s. 6d.	200 Victoria, 2s. 9d.
150 Eberhardt, 9d.	50 New Albion Gold.	20 Van, £1 8s. 9d.
30 East Blue Hills, 28s	40 Organos Gold, 7s. 6d.	25 Wheal Crebor, 17s. 6d
50 Frontino, 12s. 6d.	20 Orita, 20s.	100 Yeoland Consols,
60 Glenrock, 7s. 6d.	50 Oscar Gold, 4s. 9d.	fully paid, off. wd.
20 Great Holway.		

Offers should be made for shares in the foregoing list when no prices are affixed.

NEW ALBION GOLD MINING COMPANY (Limited).—Capital less than £35,000 in £1 shares. Return for last month 1364 ozs. of gold, (certified by the Government), and worth nearly £5500. Total output for about 4½ months actual mining, £11,500 giving clear profits at the rate of about £24,000 or 60 per cent. per annum. Management very economical. Close to the magnificent harbour of Halifax, Nova Scotia. Dividend just paid, and funds for a second one in hand. The shares are in great demand, and are rising rapidly in price.

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Has DEALINGS in the following, or any part, at net prices—

50 Blue Hills, 13s.	50 East Blue Hills.	200 New Albion.
200 Balkis, 6d.	35 Ecton, 27s. 6d.	200 New Trompet.
100 Bratsberg, 3s.	50 Frongoch, 7s.	50 New Terras.
75 British Manganese.	125 Glenrock, 7s.	50 Orita, 22s.
120 Callao Bis, 4s.	100 Georgia.	25 Polberro.
70 Carn Camborne.	30 Gunnis. (Clit), 3s. 9d.	50 Prince of Wales, 7s 3
5 Cooks Kitchen, £10¼	100 Homes Mines Trust.	30 Phœnix United, 33s 6
150 California Gold, 7s. 5d	200 Indian Consoli., 4s 3d	50 Pedn-an-drea.
75 Columbian Hyd. 9s.	70 Killifreth, 12s.	20 So. Condurrow, £6½.
80 Drakewalls, 2s. 6d.	130 La Plata, 4s. 9d.	60 South Darren, 9s.
200 Don Pedro.	50 La Trinadad, £4 13s 9	70 Standard Lead.
150 Devala Moyar, 2s. 9d.	25 Montana, £2½.	44 Trevaunance.
5 Dolcoath, £74.	40 Marke Valley, 3s.	65 Van, 26s. 6d.
200 Eberhardt, 1s. 6d	25 Minera, £4.	15 West Kitty.
10 El Callao, £46¼.	25 Mysore, £2½.	100 West Godolphin, 22s.
4 East Pool, £46¼.	120 New Kitty,	5 Wheal Agar.

Mr. Budge wants the following shares for cash, and is compelled to advertise as he cannot get them on the market:—100 West Poibreen, 12s.; 100 New Kitty, 13s.

COAL MINES REGULATION ACT, 1872.

EXAMINATION FOR MANAGERS' CERTIFICATES OF COMPETENCY.

DISTRICT UNDER THE CHARGE OF T. E. WALES, Esq., H.M. INSPECTOR OF MINES.

PERSONS desirous of being EXAMINED in this District for MANAGERS' CERTIFICATES OF COMPETENCY, under the above-named Act, should at once COMMUNICATE with the Secretary to the Board of the above-mentioned District at the following address:—

C. Henry James, 8, Courtland Terrace, Merthyr Tydvil.
By order of the Board,
C. HENRY JAMES, Secretary.

N.B.—Persons who do not reside within the District are equally eligible for examination with those who do.

MINING OFFICES, 1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON, E.C.
ESTABLISHED UPWARDS OF FORTY YEARS.

MESSRS. WATSON BROTHERS, in referring to their public Circular in the *Mining Journal*, would also observe that they BUY and SELL SHARES at the *nett* market prices of the day in all well-established and respectable Mining Companies; also, in English and Foreign Funds, Railway Stocks, &c.

GOLD MINE FOR SALE.

THE LIQUIDATORS of the HAWKINS HILL CONSOLIDATED GOLD MINING COMPANY (LIMITED) are prepared to RECEIVE TENDERS for the ABSOLUTE SALE of the MINING PROPERTIES of the company, situate at Hawkins Hill, Hill End, New South Wales, having an area of upwards of 18 acres, and embracing over 1300 feet on the line of lode, together with ALL the PLANT and MACHINERY thereon.

Under the advice of Mr. James Murphy, M.E., a cross-cut was being driven at the 800 feet level, and this work had so far progressed at the date of the liquidation of the company that Mr. Murphy was of opinion the rich veins which it was believed would be intercepted were within 30 feet, and were his anticipations to be realised the yield of the ore might equal the rich returns obtained in the upper levels.

The last report of the manager, under date 29th August, 1885, confirms this opinion, and already a new vein has been cut, estimated to yield 1½ oz. to the ton. The expenditure of a comparatively small sum should suffice to place this once famous mine in working order.

There is a 15-head stamp mill, Parnell rock-drills, hauling engine, and gear all in fair order, and the work of mining could be taken up at once.

For further particulars, apply to M. T. Hodding, 57, Lincoln's Inn-fields, W.C.

Notices to Correspondents.

Letters containing Correspondence and all other Contributions should be addressed to "The Editor." Rejected matter cannot be returned. Correspondents are requested to write on one side of the paper only.

Communications relating to Advertisements, Subscriptions, or applications for copies of the *Mining Journal* should be addressed to "The Publisher."

The Annual Subscription to the *Mining Journal* is £1 4s., post free.

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One inch	5s. 6d.	4s.

Across two columns, twice the above.

Cheques should be payable to the Proprietors, *Mining Journal*, and crossed, London and Westminster Bank."

*** Several valued contributions are held over through pressure on space.

THE MINING JOURNAL,
Railway and Commercial Gazette,

LONDON, OCTOBER 17, 1885.

ROYALTIES, RATES, AND RENTS.

The question of the royalties and rents paid for minerals in all parts of the county has of late become most prominent, owing to the depression which prevails in connection with all our mining industries. Not only are minerals and metals of every kind selling at prices which cannot pay the producer; but there are marked discrepancies in the sums paid to lessors in the shape of royalties, so that, bad as trade is, one district has an advantage over another, even at the present time. Apart from this side of the question, however, we have the fact that whilst capitalists have sunk vast sums of money in the development of minerals, and where they have not proved to be equal to what was expected, the lessors have borne no share in the expenditure, but have received the rent agreed upon without any return whatever. In some cases, too, where the mines and minerals are the property of the Crown an exemption from the payment of rates is claimed, and this is, of course, a very great advantage to the lessees of such mines, and more so to those lessors who hold direct from the Crown, as is the case in some parts of Derbyshire. In the lead mines in the Chapel-en-le-Frith district the rental and the rateable value are the same, the former being a mere trifle. Yet the question of royalties and rents involve a much higher matter, for on one or the other of these the rateable value is fixed, and even in single mines this leads to an annual payment of some hundreds or thousands of pounds. In the Chesterfield district, where are some of the largest coal mines in the kingdom very large sums are paid in the shape of rates when the collieries are actually being worked at a loss. In fixing the rateable value 7d. and 8d. in some instances is charged upon the number of tons of coal raised at each colliery during the year as a royalty or rent inclusive of coal, plant, engines, and buildings, and to that amount one-fifth is added to arrive at the gross rental. In the same county, in the Glossop Union, the gross rental is arrived at by an estimate about 7½ per cent. on the value of the coal raised. If one goes into another district there is a totally different state of affairs. At Wrexham, in North Wales, for instance, with respect to the coal mines, there is no fixed rule upon which the gross estimated rental is arrived at. In some parishes it is estimated at 11¼d., in others 11d., and in others 10d. per ton. The lead mines in the same district are assessed for rating purposes by the yearly return of royalties paid by the firms or companies working the mines, and from which no deduction whatever is made in determining the rateable value. At the mines in Cornwall, where the royalties have pressed so heavily upon the lessees, heavy sums are paid in the shape of rates. The basis upon which the gross estimated rental is arrived at for rating purposes is the amount paid to the lords as rent as dues in the preceding year, and from this no deduction whatever is made. Indeed, with respect to the copper, tin, and lead mines, say in the Liskeard district, the rateable value is the same as the dues on the ores sold. Many of these mines are worked at a loss instead of a profit, yet the royalties and rates have to be paid on them notwithstanding. At some of the salt mines in Cheshire which are known to be unproductive, the assessments are merely nominal, but such is not the case with respect to mineral and metalliferous mines which are in a like position; they have to pay royalties and rents as well as taxes when they are actually being worked at a loss. At the same time some districts in good and bad times it will be seen have a great advantage of others. We have thought it necessary to go into the question thus far with respect to rating in connection with royalties and rents, because in the discussions which have been going on the rating point appears to have been overlooked, although its importance cannot be questioned as a factor in determining what should be paid by capitalists willing to sink for metals or minerals, the value of which cannot be ascertained before they have been sunk to. In coal mines the leases are made before the coal is sunk to, and the actual depth cannot be accurately ascertained without boring, and in well-known coal fields this is usually dispensed with. But it frequently turns out that when the coal is reached there are upheavals and "down-throws," as they are termed, which make the cost of getting more than what the coal itself is worth. This is the case at one of the largest collieries on the West Riding, on which, and the buildings connected with it, more than 250,000*l.* sterling was expended. Constant breaks of strata, intersections of stone in the coal, and up and down throws made the working not only difficult but costly, so that no return on the capital expended has been received during the last 10 or 12 years Yet the rents are paid the same as if the mine was returning a good profit, and no one ever hears of the lessor offering to make a reduction and bearing some little portion of the burden which presses so heavily upon those who, unaware of the nature of the strata 500 yards or more from the surface yet gave the rent asked for what was at such a great depth, and undetermined as to its nature. The consequence of such a state of things is that many coal mines in different parts of the kingdom are now standing, the lessees preferring to pay the minimum rent to working at a still more serious loss. Yet were the lessors to reduce their royalties the mines would be worked, more money would be paid to the actual owners of the minerals, the lessees would be able to carry on without loss, and might probably make a little profit, whilst work would be found for large numbers of our labouring population. It may be said that when coal was so very scarce, and prices three times higher than they now are, large fields of coal were leased at exceptionally high prices, and the result has been the ruin of thousands who invested in that description of mining property. Some of these leases are still running, those who hold them having purchased under exceptional circumstances. An instance of this occurred quite recently, where the leases, plant, and machinery were sold for less than 3000*l.*, although the surface value alone was worth something like 30,000*l.* But the lessor, of course, could accept or refuse a purchaser as he pleased, so that the whole of the place had to be sold in one lot, so as to secure a responsible and wealthy tenant. As it is the mineral lessor is the only person benefited, and that entirely through the spirit and energy of the capitalist. The lessee naturally enough is disheartened at losing instead of increasing his capital and the miners are dissatisfied at the low wages they are obliged to work for. Some of the lessors may say, as they have done, that they did not participate in the large profits that were made some 10 or 12 years ago, but if they did not do so directly, they did indirectly, by the increased rents resulting from the larger output. The coal mines, it appears, now propose to limit the production of the collieries so as to increase the prices and wages at the same time. This they will find to be an impossibility. Indeed, were it practicable it would be most injurious to almost everyone of our great industries, and throw tens of thousands of willing workers out of employment. It is owing to the cheapness of British coal that we are able to export about one-seventh of the entire produce of the kingdom to foreign countries, and that our manufacturers of iron, steel, textile, and other goods, are able to hold their own in all parts of the world, and undersell the foreign producers in their own markets. A sliding-scale has been suggested by us with respect to mineral and metalliferous royalties, as is the case with respect to miners' wages in several districts. It certainly does not appear to be impracticable, and one would think could be made to work fairly between the lessors and the lessees, each sharing the advantages and disadvantages arising from the changes in the markets. Be that as it may, the question of mineral and mining rates and royalties generally, along with the rating of mines, is of such vital importance to the interests, not only of capitalists, but of vast bodies of workmen, that it is sure to receive special attention in the next Parliament, so that the more it is discussed the more likely an equitable decision will be come to. The questions involved in these three R's are the most important of the hour for the mining interest, and we are glad to see that our leading daily contemporaries in London, and the great provincial centres fully adopt the views recently expressed by us and now reiterated.

The Mining Market: Metals, Ores, &c

METAL MARKET—London, October 16, 1885.

Iron.	£ s. d.	£ s. d.
Pig, GMB, f.o.b., Clyde	2 2 3	—
,, Scotch pig, No. 1 Gartsher.	2 6 0	
,, ,, Coltness	2 9 0	
,, ,, Clyde	2 6 3	
,, ,, Govan	2 2 9	
Bars Welsh, f.o.b. Wales	4 7 6	4 10 0
,, ,, in London	5 0 0	—
,, Stafford., ,,	5 15 0	6 0 0
,, in Tyne or Tees	4 15 0	—
,, Swedish, London	9 0 0	9 10 0
Rails, Welsh, at works	4 10 0	—
Sheets, in London	7 0 0	7 5 0
Plates, ship, in London	5 15 0	6 5 0
Hoops in London	6 0 0	6 2 6
Nail rods, in London	6 0 0	—
Steel.		
English spring	6 0 0	18 0 0
,, cast	25 0 0	45 0 0
Swedish, keg	12 0 0	—
,, fag. ham.	12 10 0	—
Rails at works	4 15 0	5 0 0
,, Light, at works	5 15 0	6 0 0
Lead.		
English pig, common	11 12 6	11 15 0
,, ,, L.B.	11 15 0	12 0 0
,, ,, W.B.	12 0 0	12 2 6
,, sheet and bar	12 5 0	—
,, pipe	12 15 0	—
,, red	14 5 0	14 15 0
,, white	16 0 0	19 0 0
,, patent shot	14 5 0	—
Spanish	11 2 6	11 5 0
Spelter.		
Silesian ordinary brands	14 2 6	14 5 0
,, special brands	14 7 6	—
English Swansea	15 2 6	—
Sheet zinc	17 0 0	17 5 0

* At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada; IX 5s. per box more than IC quoted above, and add 5s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

Tin.	£ s. d.	£ s. d
English, ingot, f.o.b.	93 0 0	—
,, bars ,, ,,	94 0 0	—
,, refined	95 0 0	—
Australian	91 7 6	91 10 0
Banca	nom.	
Straits	91 7 6	91 10 0
Copper.		
Tough cake and ingot	43 10 0	44 15 0
Best selected	45 0 0	46 0 0
Sheets and sheathing	49 0 0	52 0 0
Flat Bottoms	55 0 0	—
Wallaroo	—	nom
Burra, or P.C.C.	50 0 0	—
Other brands	nom. 48 0 0	50 0 0
Chili bars, g.o.b.	39 10 0	—
Quicksilver.		
Flasks, 75 lbs., war.	6 2 6	—
Phosphor Bronze.		
Alloys II.		£93 0 0
,, V.		109 0 0
,, VI. and VII.		115 0 0
,, XI.		95 0 0
,, Duro A, Duro B		90 0 0
Antimony	£36 0 0	—
Brass.		
Wire	8d.	-
Tubes	6¾	-7¾d.
Sheets	5¾	-6¾d.
Yel. met. sheath. & sheets	4¾	-4¾
Tin-Plates.*		per box
Charcoal, 1st quality	0 18 0	0 19 0
,, 2nd quality	0 17 0	0 18 0
Coke, 1st quality	0 15 0	0 16 0
,, 2nd quality	0 14 6	0 15 0
Canada, Staff. or Gla. at Liverpool	8 17 6	9 2 6

General Remarks.

At the commencement of the week there was a little spurt in some metals, but the improvement has not been sustained, and a quiet, inactive tone again prevails. The principal attention just now continues to be directed towards copper, as the movements in that metal are so striking when the reduced price is taken into consideration, though it may be forced on by overwhelming supplies. There has, however, been some recovery in values of Chili bars, but as the little higher prices that were being realised drew out numerous sellers the market quickly relapsed again. In tin the steadiness of the market is well preserved, and there is a fair business doing, but speculative transactions are not very numerous. Lead remains steady, and as the imports last month were considerably less than those for the same month of last year, and the exports more, some strength should be implanted to the

tone, particularly if these two features continue a characteristic of the market. The value of the exports last month was also considerably more than that of September, 1884, a fact which clearly indicates that the little better prices do not interfere with business. It is a matter well worthy of the notice of buyers that, notwithstanding prices of lead are now a little higher than they have been, still they are exceptionally cheap, and should form even a greater stimulus to the demand than they actually do. There is nothing fresh to report in spelter, zinc, tin-plates, steel, or quicksilver: but in iron business is again assuming a dull, inanimate appearance, and some of the works are reported to be rather badly off for orders; at the same time, others are said to be fairly well occupied, particularly in the Midland counties. The most striking feature in connection with metals in general is the current low prices. This is a common characteristic of all, except tin, and it shows itself very clearly in the values given for exports for the current year. In round figures the value of exports this year have been 5,000,000*l.* sterling less than what it was last. This is taking all metals combined, and, whilst in some instances it arises from reduced exports, it is principally due to reduced prices. When it is remembered that that heavy amount has not been circulated in only one branch of the trade, in addition to the deficiency in the value of sales for consumption, then it will be seen that the depression through which we have been passing has not been over-estimated, and, further, some idea of the proportions of the existing inactivity may be arrived at. Of course with this reduction in values there is the inducement held out to buyers to effect their purchases at remarkably cheap values; but they are slow to avail themselves of the advantages, and it is only in a few instances that any extra demand has arisen, and what improvement there has been, is chiefly for metals which have slightly recovered in value. For instance, in tin-plates there is a very fair business doing, and prices for these are stiffer, and certainly above their lowest point. The same may be said of galvanised sheet-iron, for which higher prices are being realised; but in copper, on the other hand, which is at its lowest point, there is by no means an extensive business doing. The remedy for the existing evil is to create and establish a good, sound legitimate demand, and whilst the disturbed state of political affairs on the Continent, and the approach of the General Election may delay any material improvement in the trade, still, sooner or later, the low prices must almost of necessity promote trade, and cause a general restoration to business. Trade not infrequently revives by leaps and bounds, and often at times when it is least expected. Therefore, whilst there is nothing that appears very promising in the immediate future, still there is the chance of the cheap prices encouraging a regular demand sooner than is generally looked for. An increased speculative enquiry would do but little good, as that would only create an artificial improvement, and, therefore, unlikely to be permanent, but what is wanted is an extra demand both for consumption and shipment. In a few instances this has been effected, but it has not been general. It has not spread itself, and, therefore, there is no confidence even in that little better feeling which was beginning to make itself manifest, and from all parts advices are once more flowing in of limited trade, and a marked indisposition on the part of buyers to pay anything above the lowest prices that have been touched.

COPPER.

Taking the market all round, there has not been quite such an unhealthy feeling existing this week as there was last, nevertheless the tone has been very sensitive, and after steadily improving up to Monday, when 39*l.* 18s. 9d. was paid for cash parcels of Chili bars, the market afterwards relapsed, and in course of Tuesday the price eased off to the extent of 5s., and values further depreciated on Wednesday to 39*l.* 6s. 3d., but afterwards rallied to 39*l.* 7s. 6d., at which yesterday morning, in the entire absence of business, it remained steady, but fell away again in the afternoon to 39*l.* 6s. 3d., and to-day, upon the announcement of the Chili charters as 1300 tons for the first half of the month, the price has stiffened up again to 39*l.* 10s., buyers. The present position of copper is remarkably interesting, chiefly on account of the reduced price. It is unnecessary to refer to the cause of that reduction, for it is so well known, nor is it for us to say whether it is probable that the minimum of prices has now been touched, but it may be well asked what affect are the low prices having upon the trade. They might be expected to influence the market in two ways, by affecting supplies and demand. As regards supply there has been no perceptible influence produced; nevertheless, in one way supplies have been affected. Several mines have had to close, so that we are without the supply from those sources, and whilst other mines have increased their output and, in consequence, no relief afforded to the market, still had the mines which have been obliged to close have continued to send forward copper to this market it would not have prevented the others from increasing their supply, and, therefore, practically we have a shorter supply than there would have been had prices been sustained. This may be but poor consolation, and give but little encouragement to holders; still, at the same time it is a proof that supplies have been more or less interfered with by the reduction in prices. Looking back during the last 12 months, if we except the supply from America, there has been no special increase. The excess in the visible stocks is almost entirely due to the extra supply from America. How long America will be able to increase her output is the question for solution, and as regards the supply from other parts it may well be asked since there was no special increase during the 12 months ending 30th ult., is even the same ratio likely to be sustained now that copper is so much cheaper? The effect of the low prices upon the demand has not been so great as might have been anticipated, the deliveries for the last 12 months having materially fallen off compared with the previous 12 months, but, at the same time, it must be borne in mind that, so far as this year is concerned, the deliveries last month were up to the average, and during the first half of October they have been very fair. Of course, from the low prices it might well be expected that the regular demand would have developed, nevertheless, it may be a matter for congratulation that even an average ordinary business has been transacted in these depressing times, and it is possible, if not probable, when there is the slightest improvement in general trade, copper will largely participate, and a greatly extended business, compared with previous times, be transacted. In addition to what is doing for genuine requirements, there is the speculative demand, the proportions of which it is difficult to form any certain idea, because there are no figures or statistics upon which to base an estimate. At the same time, some of the leading dealers are busy laying hold of all the cheap parcels that may be offering, buying freely for cash, and showing no concern about the fall that has taken place, though the losses they have recently incurred have been enormous. These are features which, in the prevailing gloom, are apt to be lost sight of; but they exist, and if some of the operators were to show a little more spirit an important advance, perhaps only temporary, might, nevertheless, be speedily effected.

IRON.

Business in this metal continues slack, and there is no fresh feature of importance to record. Some of the works continue busy with the extra orders booked a few weeks back, but in the majority of instances there is a want of animation and an absence of vitality. New orders do not flow in so plentifully as could be desired, and advices from America are discouraging, since they show a depreciation in values. Gartsherrie, which has for many weeks been steadily sustained at $20, has been reduced to $17, and the market, after keeping dull even at that reduction, has since regained what it had lost, nevertheless those who were confident of a restoration in trade, arising from increased American business, will see from these fluctuations that no certain improvement can reasonably be expected from that quarter yet awhile. Here, also, the demand for makers' iron keeps languid, and prices tend slightly in favour of buyers. The Scotch shipments last week were again deficient, and also indicate a marked falling off compared with the corresponding week of last year. The deficiency for the whole year, compared with previous years, is very striking. Up to the end of last week they have been as follows:—

1880	Tons 561,717
1881	461,661
1882	511,843
1883	517,424
1884	442,492
1885	360,218

These figures are valuable for showing the progress of the export trade so far as Scotch shipments are concerned in a variety of ways. In the first place they show a marked falling off since 1880, but then the heavy shipments of that year were accounted for by the sudden revival which occurred in the latter months of 1879, and was continued during the fore part of 1880. However, the average quantities for these years is 475,892½ tons, consequently this year we are more than 115,000 tons below the average. However, not to limit our remarks merely to the Scotch shipments, for that only shows what is doing in one particular branch of the trade, but to take the whole of the exports into consideration we find that last month there was an increase in the total quantity shipped compared with the same month of last year; but the deficiency in the value of these exports was very great. The figures were 319,671 tons, against 309,704 tons, and the value 1,934,390*l.*, against 2,093,167*l.* Taken for the whole year, however, there is not only a marked deficiency in values, but also in quantities, the figures respectively being 16,510,298*l.*, against 18,668,958*l.*, and the quantities 2,383,536 tons, against 2,690,345 tons. The reduction in the values is the most serious item in these figures, and they are accounted for by the great drop which has been made in prices. However, they have their bright side, and in some measure support the recent advices of improved trade. Last month there was an increase in the quantity shipped, signifying that, notwithstanding prices may be unprofitable, as in many instances it is to be feared they are, nevertheless the low values have stimulated the demand. The principal increase in the exports is due to the increase in the shipments of railroad iron of all sorts, and this is a significant fact, because prior to any improvement in iron there is invariably an extra enquiry for railway material, and if reference be made back to the past history of the trade it will be found that a revival in iron has been due to a spread of the railway system either in this country or abroad, particularly in America. Reverting to the imports of last month it will be found that the quantities were very much more than they were during the same months of last year, and the values also considerably in excess, whilst those for the first nine months of the year are heavier in quantity, but less in value. The next point of striking notice is the present rate of production, which is considerably less than during the last few years, but stocks, nevertheless, continue to greatly increase. At the same time, now that there has been a turn in the exports, and the quantities shipped have begun to improve, it is to be hoped that the depression which has existed for so long a period on the iron trade may be lifted, and in anticipation of this there may still be seen some symptoms of a more cheerful feeling, which augurs hopefully for the future. In some quarters the advices from America are viewed as more promising, and, although it is difficult to reconcile this opinion with the most recent advices from that country, still, from other parts, we have slightly more hopeful returns. Thus, from India, reports come to hand of the extension of railways in that country, which accounts for some of the large shipments effected thereto, and the wisdom of purchasing largely at present low prices not only seems advisable for railway contractors, but also by merchants and other consumers and shippers. The Glasgow Warrant Market opened on Monday at 42s. 7½d., and a good business was done up to 42s. 8d., and on Tuesday various transactions were recorded between 42s. 7d. and 42s. 9d., closing, however, with an easy tone. On Wednesday the market was lower, and there was a fair business done between 42s. 5½d. and 42s. 4½d., and business yesterday was done at the latter figure, whilst the closing price to-day is 42s. 3d. The shipments last week were 9250 tons, against 11,661 tons for the same week of last year, or a decrease of 2411 tons, and which makes the total shipments for the whole of this year 360,218 tons, against 442,492 tons for the same time of last year, and 517,424 tons for the similar period of 1883. There are still 90 furnaces in blast, and the public stock has been increased by 1517 tons, and now amounts to 628,341 tons, against 626,824 tons last week. The imports of Middlesborough pig-iron into Grangemouth last week were 7560 tons, against 4440 tons for the corresponding week of last year, or an increase of 3120 tons, and which makes a total increase for the whole of this year compared with last 94,458 tons. The Middlesborough market is dull, and business is restricted, and what has been done has been principally at reduced prices. Buyers are very scarce, and second-hand lots are offering at 32s. 3d. for No. 3 prompt delivery, and about 3d. more for delivery to the end of the year. Most of the makers are pretty well booked for about the next month, and are, therefore, tolerably firm in their quotations. No. 4 forge is offering at 31s. 4½d. to 31s. 6d., and warrants at 33s. 3d. to 33s. 6d. The shipments this month have not been so good as they were last, being 3254 tons last week; at the same time there is a good demand for Scotland. In manufactured there is no change, there being scarcely any demand and most of the works badly employed, while prices keep very low. Ship-plates are quoted at 4*l.* 12s. 6d.; bars at 4*l.* 17s. 6d.; angles at 4*l.* 10s.; and puddled bars 60s. per ton. There continues to be a good deal of activity in sheet-iron at Wolverhampton; but for other descriptions there is much quietude. Prices show little change, bars being quoted at 7*l.* 10s. down to 5*l.* 10s., and superior hoops at 6*l.* There is a very small demand for pigs, hematites offering at 53s. to 54s., and cinder pigs at 32s. 6d. per ton. The advices from Birmingham, although not quite so cheerful as they were a few weeks back, are nevertheless not discouraging, and prices for galvanised sheets remain firm with a very fair enquiry for Australia, in anticipation of the proposed duty upon the imports into that country. General merchant iron is in fairly active demand, but prices all round are very low, and are said in many instances to be scarcely paying the cost of production.

TIN.

The great steadiness of this market has been its special characteristic during the past week, and from day to day the official quotation for cash parcels has been 91*l.* to 91*l.* 10s., business having principally been carried through at the former figure, though some transactions are reported at 91*l.* 2s. 6d., and to-day at 91*l.* 7s. 6d. In this metal we are so accustomed to fluctuation and change that a prolonged steadiness such as has characterised the trade during the past week is not only unusual but also striking, and it is a matter which may call for comment, and should tend to engender confidence. It will be argued that it arises principally from the fact that attention has been directed so much towards the copper market, and that this metal has in consequence been neglected. But it must be remembered that this only applies to the speculative demand, and not to the regular trade. Copper or, for the matter of that, any other metal may advance or recede, and consumers and suppliers of tin will look on with indifference, for it matters not to them, the price of tin being all that they need take into account. But with the operators who deal in both metals, their interest is divided; and when any serious movement in the one occurs, it causes the other to be neglected. It is a matter which must be considered highly satisfactory, that the *bona fide* demand is enough to support prices, even when speculation is quiet. It expels that idea which is so freely expressed that prices are sustained solely from speculative causes, and it should encourage more confidence in the future, and help to restore prices for forward parcels to their usual and normal level. In addition to this, there is the fact that during the first half of the month the deliveries of tin have been fair, signifying that at least an average general trade is being transacted. For these reasons it certainly does seem that the present value of tin is not too high, and a good trade is doing at tolerably remunerative prices. Again, the steadiness of the market bears out that which we have so often urged, and which is now becoming more and more recognised that the holders of tin are financially strong. Stocks are not divided amongst weak holders, but are principally concentrated in the hands of a few large dealers, who have the power to regulate the market almost entirely at will; but still for the time being they do not push up the market against buyers. They prefer to stimulate business by the acceptance of moderate prices rather than demand enhanced quotations, by which business might be more or less checked. It argues well for the strength of the market when, in the absence of speculative business, a by-no-means unimportant branch of sellers are able to hold their own with the firmness they have exercised this week. Altogether the condition of the market is promising, if not better prices being realised in the near future, certainly for the maintenance of quotations for some time longer. Everything depends and rests upon the question of supply and demand, and as tin suppliers are invariably moderate in their supplies, and do not adopt the suicidal policy of destroying their market by sending forward quantities over and above the trade requirements, there is no doubt that this course will continue to be adopted, and prices in consequence be well maintained, if not advanced.

SPELTER continues quiet, with a moderate enquiry at 14*l.* 2s. 6d. to 14*l.* 5s. for ordinaries, and 14*l.* 7s. 6d. for special brands.

LEAD.—Spanish is rather quieter, and we quote 11*l.* 2s. 6d. to 11*l.* 5s., and the price of English is 11*l.* 12s. 6d. to 11*l.* 15s. per ton.

ANTIMONY is featureless, at 36*l.* per ton.

TIN-PLATES are fairly active and prices remain firm.

STEEL is dull and quotations steady.

QUICKSILVER.—With a quiet trade second hands have again been sellers at 6*l.*, but the importers maintain their price of 6*l.* 2s. 6d.

In the MINING SHARE MARKET very little change has taken place since last week, and for the most part the quotations given are merely nominal, and give way in a pressure of sales, which often occurs in a dull market. The dealers have been again engaged in the "settlement" of the usual fortnightly account; but the "settlement" is a small affair to what it used to be in active times.

TIN has kept pretty firm during the week, and no change has been made in the standards for ore. Business generally has been dull, but transactions have taken place in Dolcoath, Wheal Grenville, West Kitty, and one or two more without any great change in prices. Blue Hills, ⅜ to ⅞; Carn Brea, 3 to 3½; Cook's Kitchen, 9½ to 10½; Dolcoath, 73 to 75; East Pool, 45½ to 46½; East Blue Hills, 1⅜ to 1⅝. The sale of tin for this month, with only half water power for the stamps, realised over 200*l.* Killifreth, 10s. to 12s.; New Kitty, 14s. to 16s.; Prince Royal, 4s. to 6s. The lode in the No. 2 adit is valued at 4*l.* per fathom. South Condurrow, 6½ to 7; South Crofty, 6½ to 7; Tincroft, 6 to 6½; West Frances, 8 to 8½; West Kitty, 8 to 8½; Wheal Agar, 18 to 19; Wheal Basset, 6 to 6½; Wheal Grenvilles have reached 12⅜ to 13¼; Wheal Kitty (St. Agnes), 10s. to 12s. 6d.; Wheal Metal and Flow, ⅜ to ⅝; Wheal Peevor, ⅜ to ½; South Frances have been weaker at 8 to 8½; there has been disappointment at the accounts at the recent meeting. West Basset, 1⅞ to 2⅛; Phœnix, 1½ to 1⅝; Goodevere, 1 to 1⅛; Polberro, 1⅞ to 2⅛; Trevaunance, 2⅛ to 2⅜; West Godolphin, 1⅛ to 1⅜; West Polbreen, 12s. 6d. to 15s.; Par Tin, 1 to 1¼.

COPPER rather improved in price a few days ago, but has been fluctuating, and there is very little change in prices of shares, and not much business doing. Bedford United, ½ to ⅝; Devon Great Consols, 1⅜ to 2; Mellanear, ¾ to 1; West Seton, 4½ to 5. Wheal Crebor, ⅜ to ½; the stope below the 144 west is worth 12 tons of ore and 3 tons of mundic per fathom. The points in operation in this mine are worth in the aggregate 60 tons of copper ore and 21 tons of mundic per fathom. Prince of Wales, 7s. to 9s.

LEAD keeps about the same, and the market is still dull for shares, which remain at nominal prices. Vans are quoted 1⅛ to 1⅜; Roman Gravels, 3⅛ to 4; Leadhills, 2 to 2⅛; D'Eresby, 1⅛ to 1⅜; Great Laxey, 9½ to 10, ex div.; Craven United, 9s. to 11s.; Ecton, 1⅛ to 1⅜; Great Holway, 1⅛ to 1⅜; South Darren, 7s. to 9s.; Standard Lead, 1⅛ to 1⅜; Coed-y-Fedw, 10s. to 15s.

FOREIGN MINES are very quiet, and rather lower in prices generally. Almada, 2s. 6d. to 3s. 6d.; Birdseye, 1 to 1⅛; Bratsberg, 5s. to 7s.; Callao Bis, 4s. to 5s.; Cape Coppers have declined to 20, 22; Chili Gold, 6s. 6d. to 7s. 6d.; Colorado, 2⅛ to 2⅜; Columbian Hydraulic, 9s. to 11s.; Frontino and Bolivia, 11s. to 13s.; Montana, 2⅛ to 2⅜; Glenrock, 6s. 6d. to 7s. 6d.; La Plata, 4s. to 5s.; Mysore, 1⅝ to 2⅛; Nundydroog, 8s. to 10s.; Organos, 7s. to 8s.; Panulcillo, 1⅛ to 1⅜; Richmond, 3 to 3⅛; Ruby, 5s. 6d. to 6s. 6d.; St. John del Rey, 57½ to 62½; Santa Barbara, 1 to 1⅛; Copiapo, 2⅜ to 2⅝; Nouveau Monde, 1s. 6d. to 2s. 6d.; Oscar, 4s. to 5s.; Schwab's Gully, 3 to 3⅛; United Mexican, 2 to 2⅛; Victoria Gold, 2s. to 3s.; New Albion, 1⅛ to 1⅜; Violeta, 1⅛ to 1⅜.

Tenders for 1,500,000*l.* Liverpool Corporation Three-and-a-half per Cent. stock were opened yesterday at the Bank of England. The applications amounted to 4,010,000*l.*, at prices varying from 100*l.* 10s. to 99*l.* (the minimum). Tenders at 99*l.* 6s. 6d. will receive about 79 per cent. of the amount applied for, those above that price being allotted in full. The average price obtained for the stock is 99*l.* 11s.

Mining Notes.

The tutwork item in Dolcoath accounts, which had assumed a permanent character, has now entirely disappeared, to the satisfaction of all. The *Mining Journal*, was the first in the early part of this year, to point out strongly the desirability of erasing it. Bankers' charges are the next to go.

The directors of the St. John del Rey Mining Company (Limited) have received the following telegram from Morro Velho, dated Rio de Janeiro 12th October:—Produce for the month of September, 15,500 oits.; value, 6006*l.*; yield, 3·2 oits. per ton. Stamped at Cuiaba, 1500 tons; yield, 1·3 oits. per ton

The directors of the Pitangui Gold Mining Company (Limited) have received a cable message from the agents of the company in Rio de Janeiro, dated the 12th instant, advising the amount of produce obtained for the month of September as being 600 oits. of gold. The value of this produce would amount, at 8s. 6d. per oitava, to 255*l.* sterling.

The directors of the Santa Barbara Gold Mining Company (Limited) have received a cable message from Rio de Janeiro, dated the 12th instant, advising the amount of produce obtained for the month of September as being 3300 oits. of gold. The value of this produce would amount, at 8s. 6d. per oitava, to 1402*l.* 10s. sterling.

The Richmond Consolidated Mining Company have received the following telegram from the mine at Eureka, Nevada:—Week's run (one furnace), $18,000, from 313 tons of ore. Refinery, $20,000.

The directors of the United Mexican Mining Company have received the following telegram:—The excess of returns over outlay on the mine of San Cayetano de la Ovejera for the week ending October 10 is $4950.

The Joint Stock Association are preparing to bring out the Blue Jacket Mine in the latter part of the year. This is the property of the Blythe estate of San Francisco.

After about nine months of unwearied application coal was on Friday night struck at the Albion Colliery, Ynyscadudwg. There is a rich mineral property here. The acreage taken is said to be no less than 4000. The colliery proprietors are Mr. Ebenezer Lewis, J.P., and Mr. Henry Lewis, and when the colliery is in working operation it will be the most important local undertaking of the kind except Ynysybwl and Great Western Collieries.

A petition for the winding-up of the Wheal Jane Mining Company has been presented to the Vice-Warden of the Stannaries by John Claude Daubuz, of Killion, in the parish of Kea, in the Stannaries, a contributory of the company, and Michael Henry Williams, George Williams, and William Michell Grylls, claiming to be creditors of the company, and the petition is directed to be heard before the Vice-Warden, at the Prince's Hall, Truro, on the 24th inst., at half-past ten o'clock in the forenoon.

The meeting of the Ecton Company, on Monday, passed off satisfactorily. Mr. James Judd, who presided, was able to state that the unwatering of the Clayton Mine has been completed, and that about an hour's pumping daily keeps the mine dry. Dressing machinery is in course of erection, and it is hoped that sales of blende (of which there seems to be an immense quantity) and of copper ore will be commenced before the end of the year. The unwatering of the Ecton Mine is shortly to be proceeded with. This operation is expected to take from 12 to 15 months to accomplish, at a cost of about 3000*l.* The company will then have an abundance of ground to work upon, and the testimony not only of Mr. Bowman, the local director, but of independent authorities, such as Mr. Sowerby, F.G.S., Mr. T. Collingwood Kitto, and Captain Nance, points to a very successful future for the company.

There has been increased business this week on the Cornish Mining Exchange. Much business has been done in Dolcoaths, which close at the same price (ex div.) as they were cum div. This is eminently satisfactory, as the improvement is literally 30s.—the amount of the dividend. The financial statement and Captain Josiah Thomas's report as to the position of the mine have given general satisfaction. It is agreed that the disappearance of the wages and tutwork account of some 4000*l.*, which had been put in as an asset, but which was almost wholly a debit, it having been accumulating for 80 years in money advanced to men, is a good thing. This has been wiped off in six months, and it would be good policy for Dolcoath's executive in the future to provide a reserve account. This has been effected in some Cornish mines, it is being done in others, and the richest mine in the county should not be without ready money. Nor is it thought the committee will lose sight of this pertinent matter. Clearly Captain Thomas desires it, but it is seen that the executive will not apply large sums—account after account—in the way of a reserve fund, but will go in this direction gradually, appreciating the fact that many widows and poor people depend for a living on the dividends obtainable. And having this remark in view the idea comes, considering Mr. Basset took up 2017*l.* in three months in dues, that the lord had no such kindly feeling in the making of the fine, 25,000*l.* The mining fraternity is anticipating with the highest interest the opening of the 388 fm. level, in respect of which Captain Thomas expects in a few months to have opened there some hundreds of thousands of pounds worth of tin ground. The result of the three months' working was, as the manager remarked, simply wonderful, and mining people will find a result not before known in Cornish mining in perusing the report of the meeting in this Journal.

East Pool shares have been firm since the meeting. The price is 46¼. There are no shares offering, and there is evidently little disposition to buy. A few South Condurrows have changed hands at 6⅝ to 6¾. South Croftys are 6¾ to 7¼; but they close quiet. This mine has found favour from the fact that the bottom of the mine holds out such good chances as a speculation. This has reference to the proximity of East Pool, and the richness of that property within easy distance of South Crofty. By driving a cross-cut to the extent of 15 fms., it is expected East Pool rich lode will be cut. Till something of the sort occurs, the loss at South Crofty will continue great. Nothing scarcely has been done in South Frances since the meeting—price, 8¼; but a good business has been transacted in West Kittys at 8 to 8¼. Wheal Grenvilles, while scarce, are in demand at 12¾ to 13.

The Unified Diamond Mines (Limited) is established in London with the view of purchasing as large a number as possible of the diamond mining properties situate in the four mines—Kimberley, De Beer's, Dutoitspan, and Bultfontein. These four mines, which have the monopoly of the diamond production of the world since their discovery in 1870, have produced more than 40,000,000*l.* sterling of diamonds.

The Barrett Gold Mining Company (Limited) have received the following telegram from the mines:—September results, working with six head of stamps, 224 tons, giving 280 ozs. gold.

The iron industry appears to have suffered in Austria-Hungary as well as elsewhere. It is stated that the dividend of the Prague Iron Manufacturing Company for the past financial year will be at the rate of 2 per cent. only, against 6 per cent. for the year 1883-4. The announcement is said to have had a decidedly depressing effect on the Vienna Bourse.

The manager of the Violeta Gold Placer writes that sluicing continues to go on well, and the gravel still yields gold at all points of operation. They have been making some trials on the opposite side of the river, where the gravel is of a very satisfactory nature, and gives gold freely in the sluice. The extent of this gravel is very large, and the company possess many hectares of it in their concession. The total extent of the property is equal to about 350 English acres, and the river flows right through its centre.

The sinking of the engine-shaft at West Polbreen is reported as progressing most satisfactorily, and the great point upon which attention is immediately concentrated here is the cutting of the lode at the next deeper level, which shows such decided and excellent indications where seen. Should this lode be cut as is expected it will be a most fortunate thing for the company, and a most excellent affair for the district, but there appears to be no doubt as to the value of this piece of ground, and considering its extent many are very much impressed with the importance of the undertaking. This and New Kitty attracted considerable notice a little time ago, and probably at that time neither of the properties were really worth half as much as they are at present—at any rate neither of the mines ever looked so promising as they do at the present moment.

The directors of the Drakewalls United Mining Company have made a call of 1s. per share to enable them to sink the main shaft to the depth agreed upon, &c. They have just visited the mine, and are satisfied with the progress made, and feel assured they are adopting the proper course.

The reports of the manager of Roman Gravels, in another column, states that the mine has not looked so well for years as it does now. The half-monthly sale of 100 tons of lead ore sold this week has realised a slightly better price—viz., 7*l.* 13s. 6d. per ton, amounting to 767*l.* 10s.

The monthly report of the manager this week shows that the Leadhills Mines continue to open out well in the several points of operation, with good prospects of meeting with early discoveries of lead ores.

Devon Great Consols have sampled 750 tons of copper for the month, for sale next week.

The directors of the Bratsberg Mine, at the meeting to be held on the 22nd, propose to increase the capital of the company by a sum not exceeding 15,000*l.*, making the total capital 75,000*l.* The fall in copper—equal to 5*l.* per ton on their ores—the report states has proved disastrous to the finances, yet even at the present time, and with the low price of copper, the mines are paying their expenses. The money they say is required for working capital, as the ores cannot be sent to market monthly, for in the winter time they have to be stocked on account of the ice; but the men in the meantime have to be paid.

This week's report from the Craven Moor United Mines shows that the value of the recent discovery is not only maintained, but the lode is improving both in size and value.

The Prince of Wales Mine is improving both in the bottom level and in the 102 east. The lode is now 5 ft. copper, wolfram, and tin, the latter being worth 7*l.* per fathom. New West Caradon, 1s. 6d. to 2s. 6d.; this mine is looking well.

The half-yearly report of the Scottish-Australian Mining Company (Limited) for the half-year ended June last shows that the sales of coal during that period amounted to 137,071 tons, and the net profit realised from the colliery to 20,535*l.* 10s. 5d., the necessary disbursements for maintenance and renewal having been made. The trade of the Newcastle collieries has been well maintained during the above-mentioned period, and a steady and full demand for the company's coal has been experienced. The price has remained at 11s. per ton. Up to the date of the latest communication from the manager of the company, Mr. Shannon, the business of the colliery was progressing in the same satisfactory manner as during the first half of this year, the sales from the Lambton Colliery during July having been 24,919 tons, and during August 22,725 tons. The colliery buildings, machinery, railway, and plant generally are reported to be in good order, and drainage and ventilation satisfactory. Telephonic communication has been established throughout the underground works. The balance of profit shown by the general revenue account (including 5171*l.* 14s. 2d. brought forward from the previous account), is 25,084*l.* 6s. 6d. The directors propose a dividend at the rate of 20 per cent. per annum on the paid-up capital of the company, 160,000*l.*, free of income tax, which will require 16,000*l.*; to add to the reserve fund (which will then amount to 40,000*l.*) the sum of 4000*l.*, and to carry forward to next account 5084*l.* 6s. 6d. It is proposed to make the dividend payable on Monday, the 2nd of November next. Mr. Adolphus William Young, who, as the shareholders were informed at the last meeting, was suffering from illness, is now, the directors are happy to state, much better, and has resumed his attendance at the board, but having expressed his desire to retire from the Chairmanship of the company the board invited Mr. George Smith to undertake the duties of Chairman, and Mr. Smith having consented to do so, the directors elected him. It is with deep regret that the board record the death of Mr. Alexander Lang Elder, which took place on the 5th ult. Mr. Elder occupied the chair at the last meeting of shareholders, and he continued his valuable assistance at the board until within a few weeks of his death. The company possessed in him an able and zealous supporter, and the directors a highly-valued colleague. Mr. Charles Garston Grainger has been elected to the seat at the board rendered vacant by Mr. Elder's death. Mr. Grainger had been secretary of the company since its first establishment in 1858, and he, having expressed a desire to relinquish the secretaryship, it seemed to the board that his long and intimate acquaintance with the company's affairs specially fitted him to served the company as a director. In recognition of Mr. Grainger's long and faithful services to the company the directors have agreed with him (subject to confirmation by the shareholders) that from the date of his retirement from the office of secretary he shall be entitled to receive from the company during the remainder of his lifetime a pension at the rate of 250*l.* per annum, such pension to be payable out of profits available for dividend on the capital of the company. Mr. Frederick William Turner, who has been in the service of the company since its commencement in 1858, and has a thorough knowledge of all its affairs, has been appointed to succeed Mr. Grainger in the secretaryship.

The Great Laxey Mining Company have declared a dividend of 5s. per share, free of income tax, payable on the 27th. A full report of the meeting held on Wednesday at Douglas, Isle of Man, appears in another column.

In the Mining Division of Cornwall an attempt is to be made by the National Liberal Club in the way of arbitration. Mr. Conybeare says he does not see the force of arbitration, and refers to his previously expressed willingness to abide by a test ballot. Mr. Vivian leaves the matter in the hands of his committee, by whom he will be guided.

Mr. William Abbott, writing on Indian gold mines, recognises that—"At last there are some signs of life in these long dormant properties, and it would appear as if the movement was not due to mere speculation, but to the fact that the advices fully justify more favourable anticipations.—Glenrock: These shares have advanced from 3s. 6d. to 7s., or 100 per cent. this week on cultivation prospects alone.—Mysore Gold Mining Company: The advices received to-day ought to satisfy the most sceptical that we are on the eve of important results from this property in the Colar district. Lodes ranging from 1 ft. wide and yielding 11 dwts. 10 grs. per ton, to lodes 6 ft. and even 7 ft. wide, giving from 3 to 5 ozs. to the ton, and are not to be lightly regarded. Results never exceeded in the best days of Australian gold mining. If such advices as these have been received during the excitement in 1882, when these companies were formed on the faith of reports by officials of the Indian Government, the shares would have reached as many pounds as they are now shillings. These are facts, but after previous bitter disappointments it is not surprising that they are regarded as fictions, still those who ought to be well informed give evidence of their faith by holding on for higher prices. The shares, 20s. fully paid, of the Mysore Company, are selling over 40s., or 100 per cent. premium. It will be remembered that the Indian Consolidated Gold Mining Company purchased three valuable properties in the Mysore district during the recent period of extreme depression, one of which (the Colar) actually adjoins the Mysore Company's property; and sinking upon the Champion lode (the same reef as the Mysore Company) has not only commenced, but before the close of the year there is every prospect that the rock-drill will have penetrated below the old workings. If, as is now practically certain, the same results as those from the Mysore Company's operations are obtained, the shares of the Indian Consolidated should have a corresponding advance to that which has taken place in the Glenrock and Mysore. The present price is 5s. for the 1*l.* fully-paid share, or 75 per cent. discount, at which price it may be wise for the holders of shares costing them 1*l.* to average.

At the meeting of the Eberhardt Company, on Tuesday, the shareholders decided to voluntarily liquidate the company, and to reconstruct it in the mode given below. It will be remembered that some time ago Captain Drake recommended the purchase of the Monitor mining property, the belief being that the purchase of that property would give life to the Eberhardt, and enable the company to avoid liquidation, and further that it would have restored a market value to the Eberhardt shares. The proposed purchase, however, fell through, and the directors considered it their duty to bring forward a scheme for reconstruction. That scheme was laid before the shareholders at the meeting, on Tuesday, by the Chairman, Mr. Bladon, but Mr. Snell proposed the following alternative scheme:—Capital 250,000*l.*, in 1*l.* shares; 188,000 ordinary shares 15s. fully-paid; 20,000 ordinary fully-paid to be given to preference shareholders on their subscribing for 20,000 ordinary shares 15s. paid; 2288 for interest on debentures, 13,800 reserved to pay debenture interest for three years; 5912 reserved for future issue; total, 250,000*l.*: 208,000 shares 15s. paid when fully paid-up will realise 52,000*l.*; 1s. on application, 10,400*l.*; 1s. on allotment, 10,400*l.*; 1s. in three months, 10,400*l.*; 1s. in six months, 10,400*l.*—41,600*l.*; 5*l.* per cent. on 228,000*l.* = 11,400*l.* Debentures to be secured upon the present property of the Eberhardt Company. The debenture-holders to have the option of exchanging their debentures at any time for shares at par. To be set apart half the profits from the Monitor property after paying 5*l.* per cent. on capital towards working the Eberhardt property. This alternative scheme was unanimously adopted by the directors and the shareholders, the Chairman expressing the view that it was preferable to that set forth by the board. It was also agreed that a committee of four gentlemen should be appointed to confer with the directors, and complete all necessary details, and that a final and complete scheme shall be presented to a meeting to be held a fortnight hence.

It will be seen from the subjoined report from the Cumberland Silver-Lead Mines Company that operations are proceeding satisfactorily. We are informed that dressing machinery has been bought, and will be on the ground next week:—

The satisfactory results which has attended our researches in the upper levels continue to improve in depth by opening up the main lode in the 37, both north and south of the engine-shaft. The main lode, which I discovered by cross-cutting east, 30 ft. is very wide, carrying a brangled course of ore 12 ft. in width, worth 4 tons of lead and 2 tons of zinc per fathom; and the 27 south, on the same rich lode, and 35½ fathoms in advance of the 37 fm. level forebreast, is worth 5 tons of lead per fathom, and improving. This is our pioneer level south, and I have no doubt it will continue to open still richer for a considerable length, seeing we are approaching the large Rachelwood cross-course, intersecting the lode 15 fathoms in advance of the present end which appears to be the leading course of the lode opening out and becoming yet more valuable. This level is driven south a distance of 50 fathoms from the engine shaft, 34 fathoms of which is in ore with the level forebreast in the condition described above, speaking well for the 37 fathom level following it 10 fathoms deeper with the improvements which we find depth secures on this large lode. The 17 fathom level, driven on Dropper vein, varies in value from 1 to 4 tons of lead per fathom. From this level short cross cuts can be driven on the main lode being opened up by the 27. The 37 north, however, shows a still more powerful and rich lode from 25 to 30 ft. wide hitherto missed, but which I am opening up by a regular succession of cross cuts, already proving this course of ore in a continuous line, 40 fms. in length, worth from 4 to 8 tons of lead per fathom, followed by zinc, ore worth 3 tons per fathom, as set forth in my communications, and the full set of plans recently forwarded Mr. Reed, 12, Fenchurch-street, E.C. This rich body of ores occur between two cross-courses about 50 fms. apart, which heaved the lode and displaced the strata. I may add we still find this course of ore holding away north, so that every fathom we advance gives us 37 fms of backs for stoping with the lode, settling down richest in the sole of the lowest levels throughout the mine. The foregoing remarks are confined, as you will observe, to the principal points of development, which are eminently satisfactory to all concerned. The other points thoughout the mines remain the same, and equally rich with the mine in condition to employ 90 men to raise ore, which number can be increased as development extend. You will, therefore, observe we are upon the full tide of success.—(Signed) J. B. Louis.

The sett owned by this company comprises four separate mines in the valley of the Lakes, about four miles from Keswick. The capital is 55,000*l.*, in 1*l.* shares, of which about 30,000 have been issued.

At a mass meeting of South Staffordshire chainmakers, who have been on strike for five weeks for an advance in wages, held yesterday (Friday) morning, at Cradley-heath and Rowley Regis, it was reported that some of the largest employers had consented to concede the required advance, which is an increase of 20 per cent. on present prices. About 1200 men have consequently resumed work. It was resolved to continue the strike of factories where the employers refused the advance.

The Cheshire Slate Trade.—The export returns compiled for September again show a great decrease, the total tonnage shipped from the Mersey being 90,000 tons, against 102,776 tons in the corresponding month last year. The exports for the past nine months are 40,000 tons below the average of the past 10 years, and 94,000 tons below last year's exports. There is a considerable diminution of shipments, especially to the Northern States of America.

STOCK AND SHARE LIST.

BRITISH DIVIDEND MINES.

Shares	Company	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
2000	Bedford Unit.,* c, Tavis.(£1 liab.)	0 14 0	5/-	¾ ⅞	0 1 0	0 2 6	Nov. 1884
6000	Carn Brea, c, t, Illogan†§	15 5 5	3¼	3 3½	52 11 8	0 10 0	Nov. 1881
4000	Craignant Bach,* l, Cardigan	5 0 0	—		0 5 0	0 5 0	Nov. 1882
10240	Devon Gt. Consols, c, a, Tavistock*†	1 0 0	2⅛	1¾ 2½	118 7 0	0 6 9	Dec. 1880
4700	Dolcoath, c, t, Camborne	10 14 10	74	73 75	45 14 0	1 10 0	Oct. 1885
6400	East Pool, t, c, Illogan	0 9 9	46½	45½ 46½	45 11 6	1 5 0	Oct. 1885
12000	Great Holway,* l, Flintshire	5 0 0	1⅝	1⅜ 1⅝	0 12 0	0 7 6	Sept. 1883
15000	Great Laxey, l, Isle of Man*†	4 0 0	10	9¾ 10xd	30 18 0	0 5 0	Oct. 1885
6400	Green Hurth, l, Durham*	0 6 0	5	4½ 5	5 1 0	0 5 0	Dec. 1884
9830	Gunnislake (Clitters), t, c	2 2 0	⅜	⅛ ⅜	0 19 9	0 2 0	Mar. 1882
14000	Isle of Man, l, Isle of Man*	5 0 0	—		83 7 0	0 2 0	May 1885
6000	Killifreth, t, Chacewater§	4 13 6	⅝	½ ⅝	0 14 6	0 2 0	Nov. 1883
20000	Leadhills,* l, Lanarkshire	6 0 0	2⅜	2 2¼	1 10 6	0 3 6	Sept. 1885
2500	Levant, c, t, St. Just	11 5 0	—		9 2 6	0 2 6	May 1882
400	Lisburne,* l, Cardiganshire	18 15 0	—		615 0 0	0 10 0	June 1885
10000	Mellanear, c, Hayle*	2 0 0	1	¾ 1	2 4 9	0 0 6	Apr. 1885
9000	Minera Mining Co., l, Wrexham*	5 0 0	7	5 7	69 14 2	0 2 6	Aug. 1884
40000	Mining Co. of Ireland, cl, c, l*	7 0 0	1⅛	1 1⅛	24 1 0	0 2 6	July 1885
1829	North Hendre, l, Wales	2 10 0	—		3 18 0	0 4 0	Nov. 1882
6146	Ditto	1 7 6	—		0 11 3	0 2 0	Nov. 1882
12000	Phœnix United, t, c, Linkinhorne§	6 6 6	1¾	1¼ 1¾	17 7 6	0 1 6	Apr. 1883
12000	Roman Gravels, l, Salop*	7 10 0	4½	3¾ 4	9 16 0	0 2 6	July 1885
6123	South Condurrow, t, c, Camborne†	7 5 7	7	6¾ 7	12 1 6	0 5 0	Aug. 1885
9000	South Darren, l, Cardigan*	1 10 0	9s.	7s. 9s.	0 4 0	0 2 0	Apr. 1880
6000	Tincroft, c, t, Pool, Illogan†§	14 18 6	6½	6 6½	51 3 6	0 5 0	Dec. 1881
6000	West Basset, c, Illogan†§	8 3 4	2¼	1⅞ 2⅛	28 3 8	0 2 6	July 1885
6000	West Kitty, t, St. Agnes	0 12 0	8½	8 8½	4 18 0	0 10 0	July 1885
6000	Wheal Agar, t, Illogan	19 6 0	19½	18 19	2 5 6	0 7 6	Aug. 1885
12000	Wheal Crebor, c, Tavistock	2 4 0	⅞	⅝ ⅞	1 1 3	0 1 0	July 1885
1024	Wheal Eliza Consols, t, St. Austell	18 0 0	—		59 10 0	0 10 0	Aug. 1884
6000	Wheal Grenville, t, Camborne	15 0 0	13	12¾ 13¼	3 0 0	0 7 6	Sept. 1885
4295	Wheal Kitty, t, St. Agnes§	5 12 0	¾	½ ¾	12 18 6	0 1 6	Jan. 1881
3000	Wheal Peevor, t, Redruth§	1 12 0	⅝	⅜ ⅝	9 3 8	10 0	Aug. 1885

FOREIGN DIVIDEND MINES.

Shares	Company	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
35000	Alamillos, l, Spain*†	2 0 0	1⅛	1¼ 1⅛	2 19 5	0 1 6	Sept. 1885
130000	Almada and Tirito Consol., s*†	1 0 0	3/16	1/16 3/16	0 6 3	0 1 0	May 1876
20000	Australian, c, South Australia†	7 7 6	2	1½ 2	1 13 0	0 2 0	July 1885
15000	Birdseye Creek, g, California*	4 0 0	1¼	1 1¼	1 11 0	0 2 0	June 1883
30000	Bratsberg,* c, Norway†	2 0 0	⅜	¼ ⅜	0 4 4½	0 1 2¼	Mar. 1884
30000	California,* g, Colorado	1 0 0	3/6	2s. 6 3s 6	0 3 0	0 1 0	Aug. 1884
20000	Cape Copper Mining,*† South Africa	9 0 0	21	20 21	62 7 6	0 10 0	Sept. 1885
65000	Colorado United, s-l Colorado*†	5 0 0	2⅛	2¼ 2⅛	0 14 6	0 1 0	May 1883
50000	Copiapo, c, Chili* (£4 shares)†	3 10 0	2¾	2⅜ 2⅝	2 10 9	0 1 0	Sept. 1885
32200	El Callao, g, Venezuela	40 0 0	70	50 51⅛	36 19 4	0 3 4	July 1885
70000	English & Australian,*† c, S. Aust.	2 10 0	—		3 2 9	0 1 0	Mar. 1884
8000	Eng.-Aus., g, Vict.* pref. (20000 o.)	1 0 0	—		0 3 8	0 3 8	Apr. 1882
25000	Fortuna, l, Spain*†	2 0 0	3¼	2¾ 3¼	9 0 4	0 3 3	Oct. 1885
72000	Frontino & Bolivia, g, New Gran.*†	2 0 0	¾	11/ 13/	0 12 0	0 1 0	Dec. 1883
400000	La Plata, s-l, Leadville†	1 0 0	5/6	4/ 5/	0 6 6	0 0 7½	Oct. 1882
500000	La Trinidad,* s, Sonora, Mexico	5 0 0	6⅜	5⅓ 5⅜	0 10 0	0 5 0	Aug. 1885
15000	Linares, l, Spain*†	3 0 0	4½	3¾ 4¼	20 0 4	0 3 6	Oct. 1885
20000	Marbella Iron Ore,*, Spain	10 0 0	2¼	1¾ 2¼	0 10 0	0 10 0	June 1882
135164	Mason & Barry* c, Portugal	10 0 0	7¼	7⅛ 7¾	4 7 0	0 4 0	Oct. 1885
600000	Montana,* g., U.S.A.	2 0 0	2⅛	2¼ 2⅛	0 0 8	0 0 8	July 1884
60000	New Albion, g, Nova Scotia	1 0 0	2	1¾ 1⅞	0 1 0	0 1 0	Sept. 1885
120000	New Hoover Hill, g, North Carolina.	0 10 0	8s.	5/16 7/16	0 0 3	0 0 3	May 1885
125000	Oxford, g, Nova Scotia	0 4 0	⅜	¼ ⅜	0 1 3¼	0 0 1¼	Mar. 1884
80659	Quebrada Rail., Land, & Cop. Venezuel	10 0 0	3½	3 3½	6 per cent.		1882
50000	Panulcillo, c, Chili*†	4 0 0	2⅛	1⅞ 2⅛	2 2 9	0 2 0	May 1884
25000	Pitangui,* g, Brazil (in 6000 £1 pd).	0 18 0	⅝	½ ⅝	0 1 0	0 1 0	Sept. 1880
14000	Pontgibaud, s-l, France†	20 0 0	5½	4¾ 5½	30 3 1	0 11 3	Dec. 1883
100000	Port Phillip, g, Clunes*† (£1 5s. sh.)	1 0 0	1/16	1/16	1 14 2	0 0 10	Feb. 1881
50000	Rara Fortuna,* s, Argent. Republic.	1 0 0	—		0 3	0 1 0	July 1882
54000	Richmond Consol., s, Nevada*†	5 0 0	3½	3¼ 3½	15 1 6	0 5 0	Nov. 1884
25000	Rio Tinto,* c, Mortgage Bds., Huelva.	100 0 0	97	92 96	5 per cent.		Apr. 1885
325000	Ditto, shares	10 0 0	9	8⅝ 8⅞	5 2 0	0 6 0	Oct. 1885
60000	Santa Barbara,* g, Brazil	0 10 0	1¼	1 1¼	0 12 9	0 1 0	May 1882
122000	Schwabs Gully,* d, Kimberley	10 0 0	3½	3 3¼	6 10 6	0 10 0	Jan. 1885
120000	Scottish-Australian Mining Co.*†	1 0 0	3	2¾ 3	20 p. cent.	0 2 0	May 1885
80000	Ditto, New	0 10 0	1⅛	1¼ 1⅛	20 p. cent.	0 1 0	May 1885
123500	Sierra Buttes, g, California*†	2 0 0	1	⅞ 1⅛	2 8 0	0 0 6	Oct. 1885
14062	Ditto, Plumas Eureka	2 0 0	1⅛	⅞ ⅞	3 6 6	0 1 6	Oct. 1885
125200	Silver Queen Untd.,* s, Sonora, Mex.	2 0 0	2 3/16	2 1/16 2 3/16	0 2 0	0 2 0	Aug. 1885
250000	St. John del Rey*† (£5 Stock and multiple dealt in)			57¼ 62½	5 p.c. for half-year		June 1882
160000	Tambracherry,* g, Wynaad	1 0 0	¼	⅛ ¼	0 0 6	0 0 6	Aug. 1882
625000	Tharsis,* c, sul, Spain (537330 issued)†	2 8 0	4	3⅜ 4	7 6 6	0 8 0	May 1885
14000	Tolima,* g, s, Colombia (A shares)†	5 0 0	3	2 3	6 2 2	0 5 0	Jan. 1885
6000	Ditto (B shares)	5 0 0	2¼	2 2¾	1 5 3	0 5 0	Jan. 1885
125175	United Mexican,*†‡ s, Mexico	9 17 6	2⅛	2 2⅛	0 7 6	0 2 6	Aug. 1885
25000	Victoria* (London), g, Australia	1 0 0	3/6	2/ 3/	0 13 10	0 0 8	Feb. 1881
15000	Western Andes, s, Colombia	5 0 0	4½	4 4½	4 16 3	0 10 6	Aug. 1884
2100	W. Prussian (5500 pref. sh. £10 pd.)	10 0 0	—		4 2 0	0 8 0	Apr. 1881
54800	Yorke Pen., c, South Aust. Pref.†	1 0 0	⅛	⅛	0 3 0	0 3 0	May 1882

§ Have made calls since last dividend was paid.

NON-DIVIDEND BRITISH MINES.

Shares	Company	Paid.	Last wk.	Clos. pr.
12000	Anderton, t, c, l, Devonshire	0 8 0	1⅛	⅞ 1⅛
12000	Assheton, l, Carnarvonshire*	5 0 0	—	
3200	Blue Hills t, c, St. Agnes§	4 18 6	1	⅝ ⅞
10000	Brada, * l, Isle of Man	1 0 0	—	
30000	British,* s-l, bl, Wrexham	1 0 0	—	
20000	British Manganese Company*	1 0 0	—	
10000	Burnhope, * l, Edmondbyers	0 10 0	2¼	1¾ 2¼
50000	Cambrian, * l.c, Cardigan	2 0 0	—	
50000	Carn Camborne,* t, c, Camborne	1 0 0	⅜	⅛ ⅜
37500	Carnarvonshire Cons.,* l, Llanrwst.	2 0 0	3/16	1/16 3/16
6400	Cashwell,* l, Cumberland‡	2 19 0	1¾	1½ 1¾
10000	Central Foxdale,* l, Isle of Man	0 17 6	—	
300000	Clifford Amalgamated	1 0 0	1¼	1⅛ 1¼
25000	Coed-y-Fedw & Pant-y-Buarth,* l	1 0 0	⅞	½ ¾
2450	Cook's Kitchen, t, Illogan†	42 0 9	10½	10 10½
32007	Craven Moor Uni.,* l, Pateley Bdge	1 0 0	⅝	9s. 11s
50000	Creigiog,* l, bl, Denbighshire	0 17 0	¾	⅜ ¾
36400	Crook Burn,* l, Cumberland	0 17 0	—	
12000	D'Eresby,* l, bl, Llanrwst. £1 share	1 0 0	1½	1¼ 1½
60000	Devon Friendship,* c, ars, Tavistock	1 0 0	1/-	6d. 1/
50000	Drakewalls,* t, c Calstock	0 16 0	3/-	1/ 3/
50000	Duchy Peru,* bl, l, s, Cornwall	1 0 0	1⅛	⅞ 1⅛
12000	East Blue Hills, t, St. Agnes	0 7 0	1⅝	1⅜ 1⅝
6000	East Botallack, t, St. Just	1 2 6	—	
6144	East Caradon, c, St. Cleer‡	5 7 6	—	
15000	East Devon Cons.,* c, Buckfastlgh.	2 0 0	⅝	½ ⅝
6000	East Tregembo, t, c, Marazion	0 6 5	⅜	¼ ⅜
2048	East Wheal Lovell, t, Helston	0 3 6	¾	½ ¾
25000	Ecton,* c, Wetton	1 0 0	1⅜	1¼ 1⅜
12500	Frongoch,* l, Cardgn (11000 sh. iss.)	2 0 0	—	
12000	Gawton,* c, Tavistock	2 0 0	⅜	¼ ⅜
40000	Glasg. Car., c* [30000 sh. £1 pd., 10000 15s. pd.]		⅜	¼ ⅜
30000	Gobbett,* t, Devon	1 0 0	—	
10000	Goddards,* l, o, Carnarvon	1 0 0	—	
32000	Goginan,* l, Cardiganshire	1 0 0	⅜	¼ ⅜
25000	Goodevere, t, St. Cleer	1 0 0	1¼	1 1¼
6000	Great West Chiverton, l, St. Agnes.	0 6 6	½	⅜ ½
50000	Great W. Shepherds* l, Cornwall	1 0 0	1	⅞ 1
40000	Grogwinion, l, Cardigan*	2 0 0	—	
10000	Gwern-y-Mynydd,* s-l, Flint (pref.)	4 0 0	⅛	⅞ 1⅛
8400	Hardshins, l, Westmore. (10s. sh.)	0 7 6	1	½ 1
15000	Holywell District, * l, Flintshire	1 0 0	1	¾
15000	Lady Ann,* s-l, Llanarmon	1 0 0	—	
15000	Llandegla,* l, Wales	1 0 0	—	
5120	Lovell, t, Wendron	2 1 0	⅜	⅛ ⅜
9000	Marke Valley, c, Linkinhorne‡	8 7 0	3/-	2/ 3/
20000	Mostyn Consols,* s-l, Flint	1 0 0	—	
6144	Mount Carbis, t, c, Redruth	1 19 0	2⅛	2 2½
12000	New Caradon, c, St. Cleer	0 8 3	2/6	1/ 2/6
2400	New Cook's Kitchen, t, Illogan	10 18 6	½	¼ ½
8000	New Dolcoath, t, c, Camborne*	3 0 0	—	
10000	New Holmbush,* t, c, Callington	4 0 0	—	
6000	New Kitty, t, St. Agnes	1 13 0	⅝	14s. 16s.
25000	New Langford, s, c, Callington	0 5 0	2s.	1s. 2s.
15000	New Redmoor,* var, Callington	1 0 0	—	
17500	New Terras,* t, St. Austell	2 0 0	2⅛	2 2⅛
3500	New Tincroft,* t, Lelant	6 0 0	—	
12000	New Trumpet,* t, Wendron	1 0 0	1	¾ 1
30000	New Van Cons. & Glyn,* l,	7 0 0	—	
12000	New West Caradon, c, Liskeard	0 9 3	1/-	1/6 2/6
3000	New Wheal Peevor, t, Redruth	0 10 0	—	
12000	North Blue Hills, t, St. Agnes	0 2 6	2s.	1s. 2s.
5328	North Busy, t, c, Scorrier ‡	2 6 8	2s.	1s. 2s.
10000	N. D'Eresby Mount.,* l, bl, Carnarv.	1 0 0	—	
25000	North Goginan,* l, Cardiganshire	1 0 0	—	
6400	North Green Hurth,*	1 0 0	1	½ 1

NON-DIVIDEND MINES—continued.

Shares	Company	Paid.	Last wk.	Clos. pr.
5000	North Grogwinion,* s-l, Cardigshr.	1 0 0	¾	¾
2000	North Levant, t, c, St. Just	15 3 6	—	
50000	North Molton,* c, mn, s, Devon	1 0 0	—	
65000	North Treskerby,* c, St. Agnes	1 0 0	—	
30000	Par, *t, St. Austell	1 0 0	1¼	1 1¼
6000	Pedn-an-drea, t, Redruth	4 16 0	1¼	1 1⅛
20000	Penegarreg, l, Carmarthenshire	1 0 0	—	
10000	Polberro, t, St. Agnes	0 4 0	2⅛	1⅞ 2⅛
12000	Polcrebo, t, Crowan	0 15 9	2	1¾ 2
10000	Port Nigel Svn.* s-l, Carnar. (4000 is.)	0 15 0	—	
18000	Pr. Patrick,* s-l, (als. 12000 pf. 10 p.c)	1 0 0	—	
12000	Prince of Wales, s, c, t, Calstock	1 7 0	8s.	7/ 9/
12000	Prince Royal	0 2 6	6/-	4/ 6/
36000	Russell United,* c, Tavistock	0 9 6	⅛	⅜
30000	Silver Hill,* Callington	1 0 0	7/16	5/16 7/16
50000	Sinclair,* l, bl, Whitford	1 0 0	⅛	⅛ ⅜
40000	Sortridge,* c, Horrabridge	1 0 0	—	
50000	South Caradon,* c, St. Cleer†	1 0 0	¼	⅛ ¼
6000	South Carbis, t, c, Redruth	0 16 0	1⅛	1¼ 1⅛
6000	South Kitty, t, St. Agnes	0 10 0	½	⅜ ½
6000	South Penstruthal, t, c, Gwennap	4 2 6	½	⅜ ½
30000	So. Phœnix & Caradon,* t, c, Linkinhn.	1 0 0	¾	½ ¾
6000	South Tolcarne, t, c, Camborne	5 11 6	½	¼ ½
2043	South Wheal Crofty, c, Illogan	9 0 6	7⅛	6 7⅛
4500	South Wheal Frances, t, Illogan†	11 4 4	8¾	8 8½
30000	Standard,* l. bl., Llanrwst	1 0 0	1¼	1¼ 1¾
40000	Tamar, s-l, Bearalston*	1 0 0	—	
6000	Tindene	3 3 0	2⅛	2¼ 2⅛
6000	Tolgullow United, St. Day		2⅛	1¾ 2¼
12000	Trebartha Lemarne, t, Northhill	0 11 6	—	
50000	Tregontrees and Old Polgooth Con.	1 0 0	½	⅜ ½
8000	Trevaunance, t, St. Agnes	0 15 0	2¼	2¼ 2½
1000	Vaughan,* l, Cardiganshire	10 0 0	—	
30000	Van,* l, Llanidloes	0 10 0	1⅜	1¼ 1⅜
50000	Weardale,* l, Northumber. (4l. share)	1 5 0	1⅜	1¼ 1⅜
12000	West Caradon, c, St. Cleer	0 13 6	3/6	2/5 3/6
30000	West Cornwall,* t, Cornwall	1 0 0	1⅛	1 1⅛
10240	West Devon Consols, c, Calstock	1 2 0	¾	⅛ ¼
10000	West Godolphin, t, c, Breage	1 5 6	1⅜	1⅛ 1⅜
12000	West Gonamena, c. St. Cleer	0 1 0	—	
3000	West Mary Ann, l, Menheniot	1 13 0	¼	⅛ ¼
12000	West Phœnix, t, Linkinhorne	1 7 6	¼	⅛ ¼
6000	West Polbreen, t, c, St. Agnes	0 12 0	¾	½ ¾
6144	West Wheal Frances, t, Illogan‡	14 10 1	8½	8 8½
3000	West Wheal Peevor, t, Redruth	5 0 0	½	⅜ ½
2400	West Wheal Seton, c, Camborne†§	22 0 0	5	4½ 5
6144	Wheal Basset, c, Illogan‡	9 7 6	6½	6 6½
4000	Wheal Benny, t, c, Latchley	5 0 0	7	7 7
3000	Wheal Boys, t, Redruth	1 3 6	—	
50000	Wheal Castle,* c, t, St. Just	1 0 0	1	¾ 1
12000	Wheal Coates, t, St. Agnes	0 12 0	3/16	⅛ 3/16
2585	W. Comf., & No. Tres., t, c, Gwennap	2 2 0	¼	⅛ ¼
50000	Wheal Elizabeth,* t, Cornwall	1 0 0	—	
12000	Wheal Jewell, c, St. Hilary	1 0 6	¼	⅛ ¼
12000	Wheal Lusky, t, Callington	0 3 9	3/16	⅛ 3/16
12000	Wheal Metal and Flow, t, Breage	0 3 6	1	¾ ⅞
2000	Wheal Owles, t, St. Just‡	8 3 0	—	
30000	Wh. Silver & Lanteglos,* s-l, Cameifd.	1 0 0	⅝	⅜ ⅝
6000	Wheal Sisters, t, Lelant	4 17 6	—	
4096	Wheal Uny, t, c, Redruth	7 7 0	½	¼ ½
21866	Wye Valley, l, Montgomery.*	1 0 0	—	
60000	Yeoland Consols,* t, Devonshire	1 0 0	¼	par to ¼
65000	Yorkshire Lead Mines, l.	1 0 0	12/6	10/ 12/6
4000	Ystwith,* l, Cardigan	1 0 0	—	

bl, blende; c, copper; g, gold; l, lead; s, silver; sl, slate. s-l, silver-lead; t, tin; z, zinc; i, iron; a, arsenic; d, diamond. Limited Liability Companies; † quoted on the Stock Exchange. ‡ have paid dividends.

NON-DIVIDEND FOREIGN MINES.

Shares	Company	Paid.	Clos. pr.
150000	Akankoo,* g, Gold Cst. (100000 iss.)	1 0 0	1/16 3/16
64889	Anglo-African,* d, Kimberley,†	10 0 0	¾ 1¼
120000	Asia Minor,* s-l, Lidjessy, Sivas	0 17 6	1/16 ⅛
400000	Balkis Consolidated, g, Transvaal	0 5 0	
28000	Beit,* c, Lake Sup., (22000 £4 paid)	5 0 0	
200000	British Australian,* g, N. So. Wales	1 0 0	
10000	Buena Ventura,* l, Spain (fy. pd)	2 0 0	
180000	Callao Bis,* g, Venezuela	1 0 0	4/ 5/
82500	Canadian, c, sul,* Canada†	2 0 0	1/16 ⅛
500000	Chile,* g, Venezuela (New)	1 0 0	6/6 7/6
125000	Chontales, g, s, Nicar.*† (108749 iss)	1 0 0	1/16 3/16
75000	Colombian Hydraulic, g, Colombia	1 0 0	9/ 11/
200000	Devala Moyar,* g, Wynaad†	1 0 0	⅛ ¼
75000	Devala Provident,* g, Wynaad†	0 10 0	
25000	Don Pedro North del Rey*	1 0 0	2s. 3s
214000	Eberhardt, s, Nevada*†	1 0 0	0 ⅛
40000	Georgia,* g, United States	1 0 0	
65000	Gold Coast,* g, Wassau	1 0 0	
40000	Gold Hill,* g, North Carolina	1 0 0	
550000	Indian Consolidated,* g	1 0 0	3/16 ¼
200000	Ind. Glenrock,* g, Wynaad†	1 0 0	6/6 7/6
100000	Iron Gate* cl. chr. Hungary	1 0 0	
100000	I.X.L., g, s, California*	1 0 0	1/16 3/16
50000	Javali, g, Nicaragua*	1 0 0	2/6 3/
[illegible]00000	Kohinoor,* s, Colorado	1 0 0	5/ 6/
500000	Lisbon-Berlyn,* g, South Africa	1 0 0	8d. 1/
65000	London and California, g*†‡	2 0 0	
13500	Mysore,* g, India†	1 0 0	1⅞ 2⅛
75000	New Callao,* g, Venezuela	1 0 0	2/ 3/
78500	New Emma,* s, Utah	10 0 0	3/6 4/6
300000	New Potosi,* g, Venezuela†	1 0 0	3/16 5/16
180000	North Mexican, s, Mexico	1 0 0	
3000	Do. debentures do.	20 0 0	
2000	Do. Preference do.	20 0 0	
100000	Nundydroog,* g, Mysore	1 0 0	8/ 10/
5000	Olathe,* s-l, Leadville, Colorado	1 0 0	
125000	Ooregum,* g, Mysore	1 0 0	2/ 3/
120000	Do. Preference 10 p. c.	0 18 0	
12000	Oregon g, U.S. (4000 prf. sh.)	0 2 6	
15000	Organos,* g, Colombia	1 0 0	7/ 9/
20000	Orita,* g, Colombia	1 0 0	1 1¼
62500	Oscar,* g, Norway (£1)	1 0 0	4/ 5/
12500	Do. Preference	0 7 6	
80000	Ouro Preto* g, Brazil	5 0 0	
90000	Pestarena United, g, Italy*†	3 0 0	1/16 ⅛
80000	Pierrefitte* (20000 pref.)	1 0 0	
130000	Placerville, g, q, California	1 0 0	1¾ 2¼
40000	Ravenscliff g, N. Zlnd; c, S. Aust.	1 0 0	
90000	Rhodes Reef,* c, Wynaad†	1 0 0	1/16 3/16
25300	Ruby and Dunderberg, g, Nev.*†	10 0 0	5/6 7/6
250000	Sentein,* s-l, bl, Ariège, France	1 0 0	
100000	Silver Chord,* s, Colorado	1 0 0	¾ 1
50000	Silver Peak,* s, Colorado	1 0 0	⅛ ¼
107363	So. Austral. Cop. Mines (Corp. of)	1 0 0	1/6 2/6
10000	South-East Wynaad, g, India†	1 0 0	
100000	Spitzkop,* g, Transvaal	1 0 0	9/16 11/16
100000	Tocopilla,* c, Bolivia	0 1 0	⅛
200000	Transvaal,* g South Africa	1 0 0	3s. 5s.
200000	Victoria,* g, Venezuela	1 0 0	2/6 3/6
60000	Violeta,* g, Spain	1 0 0	1⅛ 1⅜
20000	Wentworth,* g, Wynaad	0 16 0	⅛ ¼
75000	West Callao,* g, Venezuela	1 0 0	3/6 4/6
100000	West Frntno & Boliv.,* g, Colombia	1 0 0	
80000	Wynaad Perseverance,*† g	1 0 0	
75000	Yorke Peninsula, c, So. Australia†	1 0	⅛

MISCELLANEOUS.

Shares	Company	Paid.	Price.
10	Anglo-American Brush	8 0	2 2⅛
10	Ditto do.	10 0	3¾ 4¼
50	Lon. & Glas. Engin. & Iron Ship	25 0	15 18
10	Noble's Explosives [L]	10 0	15 16
5	Swan United Electric	3 0	⅛ ¾
12	Tel. Con. & Maintenance [L]	12 0	36 37
10	United Asbestos	10 0	
10	Young' Paraffin Light & M O.	8 0	11 12

HOME RAILWAYS.

ORDINARY SHARES AND STOCKS.

Present amount.	Fully pd. Stk. or sh.	Company	Closing quotation. Last week.	Last night.
10,856,970	Stock	Caledonian	97 97½	98
14,991	£20	Cornwall	5½ 4½	5½
375,000	Stock	Cornwall Mineral	10 8	10
2,642,000	,,	Furness Consolidated	105 102	104
4,927,900	,,	Glasgow & So.-Western	92 90	92
12,354,547	,,	Great Eastern	63½ 62⅞	63
8,867,977	,,	Great Northern Consol.	109½ 108½	109½
1,159,275	,,	ditto "A"	99½ 98½	99½
1,159,275	,,	ditto "B"	151 149	151
1,000,000	,,	ditto Def., div. to accrue from Mar. 1, '85	112 110	112
19,211,670	,,	Great Western	135 134¼	134½
1,722,995	,,	Highland	—	
300,000	10 sh.	Hull and Barnsley	3½ 3¼	3½
15,392,995	Stock	Lancashire & Yorkshire	110½ 109	110
3,156,300	,,	Lon., Brigh., & S. Coast	118 115	117
2,171,850	,,	ditto Preferred	141 139	141
2,171,850	,,	ditto Deferred	97½ 96	96½
11,123,051	,,	Lon., Chat., & Dov. Arb.	16⅝ 16⅛	16⅜
36,784,827	,,	Lon. & No.-West. Con.	163¼ 163	163½
9,784,161	,,	London & So.-Western	125½ 124½	125½
—	,,	Lon., Til., & Southend	158 156	159
5,833,836	,,	Man., Shef., & Lincoln	67 65	67
	,,	ditto Preferred	102 100	102
	,,	ditto Deferred	32¾ 31½	32
5,281,830	,,	Metropolitan	104½ 102½	103½
83,270	,,	ditto Preferred	—	
83,270	,,	ditto Deferred	—	
2,250,000	,,	Metropolitan District	39¾ 38½	39
26,428,079	,,	Midland	127 127¼	127¾
4,625,869	,,	North British	87¾ 88¼	88¾
22,812,333	,,	North-Eastern Consol.	153¼ 153¼	153¾
3,231,140	,,	North Staffordshire	90½ 89½	90½
237,480	,,	Rhymney	185 180	185
3,170,870	,,	South-Eastern	117 115	117
2,869,670	,,	ditto Preferred	144 142	144
2,869,670	,,	ditto Deferred	93¼ 92	92½
1,403,200	,,	Taff Vale	260 252	257

BANKS.

Issue.	Shares.	Company	Pd.	Clos. pr.
100000	10	Agra [L]	all	8½ 9¼
80000	20	Anglo-Egyptian Banking [L]	all	18 19
40000	40	Bank of Australasia	all	94 96
12500	20	Bank of British Columbia	all	23½ 24½
20000	50	Bank of British North America	all	58 60
19000	25	Bank of Egypt	all	25 27
15000	20	Bank of New South Wales	all	66 68
100000	10	Bank of New Zealand	all	27 28
32000	25	Bank of South Australia	all	38 40
20000	50	Bank of Victoria	25	35 37
40000	20	Chartrd. of Ind., Aust., & China	all	21 22
30000	25	Ch. Merc. of Ind., Lond., China	all	18½ 19½
20000	100	Colonial	30	43 45
50000	20	English Bk. of Rio de Janeiro [L]	10	12 13
60000	25	London and River Plate [L]	10	13 14
60000	7	London and San Francisco [L]	all	4½ 5½
150000	20	London Chartered of Australia	all	21½ 22½
100000	10	National Bank of N. Zealand [L]	3½	1¼ 1¾
30000	10	Queensland National [L]	5	11¼ 11¾
40000	100	Stndrd. of South Africa [L]	25	34 36
60000	75	Union of Austra	25	70 72

TELEGRAPH COMPANIES.

Share	Company	Pd.	Clos. pr.
Stk.	Anglo-American	100 0	30 31
10	Brazilian Submarine	10 0	11¼ 11⅝
10	Cuba	10 0	12 12⅝
10	Direct Spanish	9 0	1½ 2
20	Direct United States Cable	20 0	9 9¾
10	Eastern	10 0	11¾ 11⅞
10	East. Exten. Austr. and China	10 0	12½ 12¾
10	German Union	10 0	9¼ 9¾
10	Great Northern of Copenhagen	10 0	13¾ 14¼
25	Indo-European	25 0	31 32
10	London Platino Brazilian	10 0	3 3½
8	Reuter's [L]	8 0	7½ 8
Stk.	Submarine	100 0	205 215
	United Telephone [L	5 0	11¾ 12¼

IRON AND COAL COMPANIES.

Shares.	Company.	Paid.	Price.
100	Abbot, John, and Co.	75 0	55 60
100	Ashbury Co. [L] (new)	90 0	28 30
3	Bagnall, John, and Sons [L]	3 0	
10	Benhar Coal Co. [L]	10 0	
10	Bilbao River & Cantabrian R. Co.	10 0	6¾ 7¼
20	Bolckow, Vaughan, & Co. [L] A	12 0	7⅞ 8
50	Brown, Bailey, and Dixon [L]	40 0	
100	Brown, John, and Co. [L]	75 0	66¼ 66¾
100	Cammell and Co. [L]	80 0	77 77½
20	Cannock & Huntington Coal [L]	10 0	10½ 10 dis
10	Central Swedish Iron & Stl. [L]	10 0	
50	Charlton Iron Co. [L]	50 0	
10	Chillington Iron Co. [L]	10 0	— ⅛
10	Consett Iron Co. [L]	7 10	18¾ 19
1	Consett Spanish Ore [L]	1 [illegible]	4⅜ 4⅞
20	Darlington Iron Co. [L]	18 10	25/ 28/
23	Ebbw Vale Co. [L]	20 [illegible]	4¾ 4⅞
5	English Crown Spelter [L]	5 0	1½ 2
8	Genl. Mining Ass. [L] (fu. pd.)	8 0	4½ 5
60	Knowles, Andrew, and Co. [L]	5 0	5½ 5¾
20	Llynvi and Tondu [L]	20 0	1½ 2
10	Lydney & Wigpool Iron Ore [L]	9 12	½ 1
10	Midland Iron Co. [L]	5 0	
10	Monkland Iron & Coal Co. [L]	10 0	2¼ 3
4	Mwyndy Iron Ore [L]	3 15	⅛ ¼
62½	Nant-y-Glo & Blaina (8p.c. prf.)	62 10	46 48
3	Nerbudda Coal and Iron [L]	49 6	1 1½
10	Newport Abercarn Coal Co. [L]	10 0	7 8
35	Palmer's Shipbldg. & Iron [L]	35 0	20½ 21
100	Parkgate Iron Co. [L]	67 0	56½ 57½
20	Patent Nut and Bolt [L]	14 0	18¼ 18¾
50	Pearson and Knowles, B,	50 0	25 27
20	Pelsall Coal and Iron [L]	20 0	5 6
5	Rhymney Iron Co. [L]	5 0	1½ 1⅜
16000	St. Helen's Coal & Clay Co. [L]	1 5	
10	Sandwell Park Colliery Co. [L]	10 0	
100	Shotts Iron Co. [L]	100 0	35 40
25	Sheepbridge Iron and Coal [L]	22 0	4½ 4½
50	Silkstone & Dodw. Cl. & Iron [L]	45 0	
15000	Somorrostro Iron Co. [L]	5 0	12 15
100	Staveley Iron and Coal Co. [L]	60 0	52 52¼
100	Ditto ditto B	10 0	8¼ 8¾
5	Teesside Iron & Engine Works	5 0	½ ¾
60	Tredegar Iron and Coal, A [L]	36 0	18 18½
25	Ditto ditto B	25 0	16 17
10	Vancouver Coal [L]	8 0	2½ 3½
25	West Cumberland Iron & St. [L]	22 0	3¼ 3½

TRAMWAYS.

Issue.	Shares.	Company	Pd.	Clos. pr.
40000	5	Anglo Argentine [L]	all	6 6½
10000	10	Barcelona [L]	all	8½ 9½
12600	10	Belfast Street Tramways	all	11¾ 12¼
3012	10	Birkenhead, Ordinary	all	1½ 2½
3000	10	Ditto, 6 per cent. Preference	all	4 5
49600	2	Brazilian Street Railways	all	1¼ 1½
10000	10	Bristol [L]	10	7¾ 8¼
25000	10	Bordeaux Tram & Omnibus [L]	all	8¼ 8¾
30050	10	Calcutta [L]	all	3¼ 4¼
3200	10	Chester [L]	all	
54870	10	Dublin	all	9 9½
28889	10	Edinburgh Street Tramways	all	11 11½
35000	10	Glasgow Tramway & Omni. [L]	9	15 15½
[illegible]000	10	Hughes Loco. and Tram. works	all	
8073	10	Hull Street Tramways	all	6¼ 7¼
17770	6	Imperial [L]	all	¾ 1¼
40000	10	Liverpool Unit. Tram & Om. [L]	all	10 10½
3[illegible]890	10	London [L]	all	16½ 17
20900	10	London Street Tramways	all	18½ 18½
77000	10	North Metropolitan	all	18¾ 19¼
7935	10	Nottingham and District [L]	all	6½ 7½
24500	10	Provincial [L]	all	6½ 7
8000	10	Sheffield	all	6 6½
5000	10	Southampton	all	8¼ 8¾
6000	10	Sunderland [L]	all	3 3½
10000	10	Swansea [L]	all	
14212	10	Tramways of France [L]	all	3¾ 4¼
13817	10	Tramways of Germany [L]	all	12¾ 13¼
20000	5	Tramways and Gen. Works [L]	all	½ 1
40000	5	Tramways Union [L]	all	3½ 4
25000	10	Vale of Clyde	6	
8259	10	Wolverhampton [L]	all	4½ 5½

FINANCIAL AND INVESTMENT

Issue.	Shares.	Company	Pd.	Clos. pr.
49150	10	Aus. Mort. & Agency [L] Eng. issue	2	2⅛ 3
20000	25	Australian Agricultural	21½	120 125
100000	10	Aust. & New Zealand Mort. [L] Shs	1	1 1¼
101960	Stk	Do. 4½ per cent. Deb. Stock	100	98 100
80000	25	Aust. Mort. Land & Finance [L]	5	16 17
592000	Stk	Do., do. 4 per cent. Deb. Stock	100	99 101
84[illegible]2	1	Canada Company	1	75 78
26[illegible]425	10	Canada North West Land Co. [L]	5	1¾ 2¼
130000	1	Central Argentine Land [L]	1	2 2¼
77000	5	Colon. Inv. & Ag. of N. Zealand [L]	1	1⅛ 1⅜
1202456	Stk	Foreign & Col. Gov. Trust [L] Pref.	100	120 123
1067568	Stk	Do. Deferred	100	120 123
200010	6	General Credit and Discount [L]	3½	3⅛ 3¾
25000	10	Land Corporation of Canada [L]	3	¾ 1¼
100000	½	London & S. African Explor. [L]	⅛	7 7½
36036	50	London Financial Association [L]	42½	— —
45000	10	Manitoba Mort. & Invest. [L]	1	½ ¾
100000	10	Queensland Invest. & Land Mort.	2	3⅛ 3⅜
400000	Stk	Scottish Australian Invest. [L]	100	180 190
200000	Stk	Do. 5 p. c. Guaranteed Pref.	100	112 117
200000	Stk	Do. 6 per cent. do.	100	128 133
100000	10	S. Aust. Land Mort. & Agency [L	2	3⅛ 3⅜

INSURANCE COMPANIES.

Issue.	Shares.	Company	Pd.	Clos.
1000	100	Alliance Marine	20	23 4
50000	20	British and Foreign Marine [L].	4	22½ 23¼
550000	50	Commercial Union	5	15 16
50000	50	Eagle	5	6½ 7
5000	10	Globe Marine [L]	2	¾ 1¼
27500	100	Imperial Life	10	24 25
13453	100	Indemnity Marine	50	14 15
100000	10	Lion Fire [L]	1¼	⅝
49626	20	L'pool & Lond. Globe (£1 annty)	2	24 25
35862	25	London	12½	41 46
40000	25	London and Lancashire Fire	2½	6¼
50000	20	London and Provincial Marine [L]	2	4 4½
40000	25	Marine [L]	4½	28 29
50000	10	Merchants' Marine [L]	2	1 ⅛
50000	10	Maritime [L]	2	3 3½
100000	25	North British and Mercantile	6¼	31½ 32½
30000	100	Northern	10	44 45
40000	25	Ocean Marine	5	5 5½
6722	—	Phœnix	—	205 210
200000	10	Queen	1	2⅛ 2¼
100000	10	Railway Passengers	33s.	8 8½
200000	50	Rock Life	⅛	7 7½
50000	10	Sea	2	—
135000	20	Lancashire	2	4½ 5
4000	20	Standard Marine	4	—
100000	20	Thames and Mersey Marine [L].	2	11 11½
40640	20	Union Marine, Liverpool [L]	3½	4¼ 5½
50000	20	Universal Marine [L]	3	3 3½

GAS COMPANIES.

Issue.	Shares.	Company	Pd.	Clos. pr.
5000	20	Bahia [L]	all	25 26
310000	5	Bombay [L]	all	6⅛ 7
10000	5	Ditto, New [L]	4	5 5½
29700	Stk	Brentford Consolidated	100	217 222
14000	20	British Gaslight [L]	all	42 44
50000	Stk	Commercial Consolidated	100	255 260
20000	20	Continental Union [L] Orig.	all	40½ 41½
20000	20	Do. do. New, 1869, 1872	14	27½ 28½
10000	20	Do. do. 7 per ct. Preference	all	32 34
23406	10	European [L]	all	22 23
94850	Stk	Gaslight and Coke, A, Ord.	100	234 237
254200	Stk	Do. 4 per cent. Deb. Stock	100	108 111
5000	10	Hong Kong and China	all	19½ 20½
2300000	Stk	Imperial Continental	100	214 217
12000	5	Malta & Mediterranean [L]	all	5¼ 5¾
100000		Metrop. of Melbourne 6 p.c. Deb.		
25000	20	Monte Video [L]	all	17½ 18½
10000	5	Ottoman [L]	all	6 7
30000	5	Oriental [L]	al	8¾ 9¼
27500	20	Rio de Janeiro [L]	all	23½ 24½
[illegible]00000	Stk	South Metropolitan, A	all	274 278
50000	Stk	Ditto ditto, B	all	223 228

Law Intelligence.

THE HIGH COURTS OF JUSTICE—Wednesday.
VACATION COURT (CHANCERY DIVISION).
Before Mr. Justice Mathew.

IN RE THE BALKIS COMPANY.

This was a creditor's petition for the winding-up of the above company. Counsel now stated that since the presenting of the petition two events had happened; the company had passed a resolution for a voluntary liquidation, and paid the petitioner's debt. He believed, however, that the company wished to take advantage of the petition to obtain a supervision order.

Mr. Swinfen Eady, for the company, said that was so.

Mr. Justice Mathew made the order.

Mr. Swinfen Eady then applied *ex parte*, on behalf of the liquidator, for the sanction of the Court to a scheme for reconstruction. He stated that a new company was to be formed, called the Balkis Consolidated Company, to take over the property and assets of the old company, and that was also to pay the unsecured creditors of the Balkis Company in full, the shareholders of the latter were to have an interest in the former, and the position of the debenture-holders would not in any way be prejudiced. The new company would have an available capital of 13,000*l.* to work the mines, &c., in South Africa. Application had already been made for shares to the amount of 12,000*l.*

His Lordship approved the proposal.

GREIG V. COCHRANE AND ANOTHER.

In this case Mr. Marten, Q.C., made application, on behalf of Mr. Greig, a debenture-holder in a company formed for the purpose of working some mining property known as the Gold Hill, in the State of North Carolina, to the Court to direct the two defendants, the trustees of the Deed of Trust, to borrow on the security of the property the sum of 1500*l.* The learned counsel said that the property consisted of 1000 acres of mineral land, and it was absolutely necessary for the protection of the property that the money should be furnished without further delay. The defendant company had recently exhausted all its funds and was, in fact, commercially insolvent, being unable to meet the demands upon it, or even to pay the interest due on the debentures. A petition had been presented to wind it up which was to be heard on October 31, but that would not in any way interfere with the Court dealing with the matter of this motion. All the other debenture-holders supported the application.

No one appeared to oppose, and his Lordship accordingly granted the application.

OUTRAGE OF MINERS ON STRIKE.

The West Riding Justices, sitting at Pontefract, have, in dealing with six men charged with a serious assault on three men who continued working at the Frystone Colliery, Yorkshire, on their employers' terms when the other men were on strike, expressed their firm determination to put down as far as they were able such outrages within their district. The six men brought up in custody were, Michell Bentley, George Perkins, Richard Wilks, William Tindall, Henry Robins, and John Cockram, they being charged with having on Saturday, September 26th, at Castleford, assaulted John Jones, Richard Jones, and Wilson Jackson. For some months past over a hundred men have been on strike at the Frystone Colliery, and some of the hands with 50 imported from Staffordshire having continued to work, the ire of those on strike was aroused and they frequently intimidated the men, making it so that the men went in fear of their lives, and had been constantly protected by the police. On the Saturday night in question, the three complainants were surrounded in the principal street of Castleford by a howling mob of some 200 or 300 people, who cried out loudly against their victims and incited one another to assault them. After hustling the three men about the crowd seized them, threw them down, and brutally kicked and maltreated them. The younger two of the complainants made their escape after they had been seriously assaulted, and had recognised several of their assailants. The elder complainant—John Jones, a man of nearly 60 years of age—was left quite at their mercy. He was thrown down, and kicked all over the head and body. He ran for refuge into two public-houses, and then into a grocer's shop, being ejected from each, and thrown again into the midst of the crowd, the grocer telling him that he had no respect for the life of a Frystone "black sheep." As Jones was being turned out of the second public-house in which he sought refuge the mob came upon him "like a seething mass of hungry wolves," as Mr. Kaberry, the solicitor for the prosecution, put it. A policeman who came up drew his staff, and standing single-handed between the crowd and their unfortunate victim threatened to fell the first man who approached. In this way he escorted Jones to the police-office, the poor fellow being struck many times with stones on the way thither. When the mob had dispersed he was conveyed home in a cab more dead than alive. He had since been under medical treatment, was unfit for work, and would be for a very considerable period. The identification of the six men charged was clearly established, it being stated that several others for whose apprehension warrants had been issued had absconded. The Bench said that they were thoroughly determined to put a stop as far as they were able to such intimidation of and assaults on men who were willing to work on their masters' terms. Bentley was committed for four months' imprisonment with hard labour and a fifth month in default of payment of costs, and each of the other five was committed for two months and for a further fortnight in default of payment of costs. A large number of miners assembled in Court from all the surrounding districts, and the greatest interest was manifested in the proceedings.

At the Pontypridd Police Court, on Wednesday, before Mr. J. Ignatius Williams, Zephaniah Thomas, manager of the Tynewydd Colliery, near Porth, and John Griffiths, overman at the same colliery, were summoned for the violation of the ninth general rule of the Mines Regulation Act of 1872, which provides that "where a place is likely to contain a dangerous accumulation of water, the working approaching to such place shall not exceed 8 ft. in width, and shall be constantly kept at sufficient distance of not less than 5 yards in advance with a bore hole near the centre of the work, and sufficient flank bore hole on each side." Mr. Thomas Williams, Merthyr, assisted by Mr. Randall, prosecuted, and Mr. Walter Morgan, Pontypridd, defended. On the 1st of August a man named Evan Thomas was employed in a stall working in the direction of an accumulation of water, which was oozing out at the bottom of the coal. In a dip below about 18 or 20 men were engaged who just before the outbreak of water had gone up to a higher place to eat their dinner. Evan Thomas struck into the accumulation of water, which rushed forth with great impetuosity down the dip, but fortunately all escaped by running to a higher part of the workings. Mr. Walter Morgan submitted for the defence that the manager was unwell on the day the offence was alleged to have been committed. A fine of 2*l.* and costs was imposed,

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Mr. John Clare, one of the best known men in Liverpool commercial circles, has just died at an advanced age. Many years ago he was amongst those who suggested the protection of war vessels by means of iron plates, out of which theory the present system of iron shipbuilding has developed, and, alleging that his suggestions had been practically adopted and carried out by the officials of the Government Dockyards, he made a claim upon the Government for a sum of about a million sterling as compensation. The claim was not entertained, however, and though his case was frequently brought before successive Parliaments, nothing came of it.

At Exeter, on Saturday, a stock and share broker and mining agent, named Harris, was committed for trial on a charge of defrauding the local building society to the extent of 3500*l.* The alleged defalcations were spread over a period of eight years, but had escaped notice owing to the loose system of audit.

THE ERECTION OF STOPPINGS WITH A VIEW TO ISOLATE PART OF A MINE ON FIRE.

At a meeting of the North Staffordshire Mining Institute at Stoke-upon-Trent, on Monday evening—Mr. James Lucas presiding—Mr. A. R. Sawyer, Assistant Government Inspector of Mines, read a paper on this subject, in the course of which he said the erection of stoppings in connection with an underground fire, if postponed too long, is attended with more or less risk to those engaged in the work. More or less severe explosions have often occurred before the work was completed, unfortunately attended, in a few cases, with loss of life. It is easy to build stoppings in the intake, as the men are then in fresh air; not so, however, in the return, which conveys the products of combustion over the men. In the latter case, although the smoke or gobstink may retard the work, it may not be so dense as to prevent it altogether without other arrangements. If it is, then air as to be provided by bratticing from a specially arranged split, or the men require an apparatus for breathing in noxious gases to work with. So long as a brisk current of air is passing through the district affected, there is comparative safety, even in a fiery mine, as although the fire is being fed, fire-damp will, probably, not accumulate, and if it does, there will probably be sufficient smoke to destroy its explosive qualities. The erection of stoppings destroys this equilibrium. The current of air passing through the district is gradually cut off. As the stoppings are being completed too little air is passing in to carry off the fire-damp which is accumulating, but quite enough to form an explosive mixture with it. For this reason, where several stoppings are required, they are usually built as quickly as possible at one and the same time, so that the persons engaged in the work are exposed to this change of condition during the least possible time. From several instances which have come under my notice of underground fires having been successfully mastered by means of stoppings, I append a few remarks, which may be serviceable to those likely to be engaged in similar operations:—1. The places for the erection of stoppings should be selected so that as few as possible may be required.—2. The erection of stoppings if decided upon should proceed without delay.—3. They should all keep pace with one another, those in the return leading.—4. They should all be closed about the same time, but those in the return first, after which all persons should withdrawn from the mine.—5. Consistently with the previous remarks the stoppings should be placed as near the seat of the fire as possible. In erecting these stoppings preference should always be given to those in the return as regards completion and closing, for the following reasons expressed by Belgian engineers on the occasion of a fire at the Agrappe Colliery:—By first closing the return the products of combustion are dammed back, and mix with the air entering at the intake. Gas accumulates at the same time, and tends to form an explosive mixture with the air. But as the products of combustion have a neutralising effect on this mixture, 10 per cent. being sufficient to destroy its explosive qualities, if they are produced equally or before an accumulation of gas, no explosion is to be feared. If, however, the intake is cleared first, the products of combustion having free egress, the latter will be drawn out owing to their light specific gravity, whilst the air contained in the district becomes charged with gas, and an unavoidable moment occurs when the mixture is explosive. As the fire continues to burn for some time after the stoppings are closed, until all the oxygen of the enclosed air is consumed, the gases produced by this combustion would exert a considerable pressure on the stoppings if there was no outlet for them. For this reason a pipe (sometimes two) is fixed at the top of the stoppings about 3 in. in diameter. These pipes are supplied with stopcocks, which enable the pressure to be relieved as required. It is sometimes considered best not to dam back the gases issuing into the returns too suddenly, so that by leaving the pipe open for a short time after closing the stopping, this object is attained. Care should be taken, however, to prevent an inrush of fresh air into the district, which could be caused by the subsequent cooling of the ignited substances. It is difficult to lay down any definite rules as to how the stopping should be made, and of what material, as each case of an underground fire presents special features.—1. In its extent.—2. In the nature of the seam in which it occurs.—3. In its accessibility for conveying materials to it.—4. In the number of openings requiring stoppings.—5. In the nature of the materials at hand. Where great danger is apprehended it may be advisable to erect temporary stopping with the greatest possible dispatch, not with a view to resist force in any way, but only to cut off the air temporarily. After this all persons should be quickly withdrawn, and if this operation is attended with success, and sufficient time has elapsed, the erection of the permanent and stronger ones may be undertaken. On no account should the temporary stoppings be interfered with to facilitate the erection of the permanent ones. Sufficient room should be left in front of the temporary ones for the erection of the permanent ones. An accident which proved fatal to one man and jeopardised the lives of several others occurred to my knowledge in consequence of trying to remove a temporary dirt stopping to make room for the erection of a more permanent one. The fire in this case occurred in the Great Row Seam, and there was no danger from firedamp. On distributing the stopping the gobstink which was pent up behind it issued out strongly and overpowered the men.

Temporary stoppings can be made—1. Of brattice.—2. Wooden planks combined with brattice.—3. Wooden planks covered with damp clay, which will not remain effective long, as the clay will dry and crack.—4. A door frame can be erected, and the door closed at the last moment or from a distance, the hinges being then either at the side or at the top.—5. Sand if available, or any loose material at hand can be heaped up against a few props and planks loosely erected, or against posts laid in a horizonial position. In such operations dispatch is of great importance. Permanent stoppings are built in small well-selected places if possible, forming a recess, and if the sides, roof, or floor, are loose, they are taken up to a solid foundation, 3 ft. 6 in. being not unusual. Coal is dressed until a sound, solid face is met. A back wall of brick and mortar is first built, from 9 in. to 36 in. thick, every course being plastered if time allows. A front wall of brick and mortar is then commenced at a distance of from 3 ft. to 9 ft., and the intervening space meanwhile filled with sand, and a little mortar or quicklime added to it, the whole being tighly rammed in. Sometimes three walls are built, and the two back ones are less than 3 ft. apart. Mine dirt is sometimes used where sand is not available. In conclusion, I may say that it would be very desirable if a full description of all cases of gobs and other fires occurring, and of the methods adopted to build them off, were generally made known for the sake of information and future guidance. Considering the importance of the subject, it is to be hoped that every member of this Institute who has had experience in this matter will state his opinions for the purpose of comparing them with the foregoing remarks, so that, if possible, some definite conclusions on the subject may be arrived at. The paper was ordered to be printed, but a long and animated debate took place on it, and also on one read by Mr. Spruce at a previous meeting, "On Special Packing as a Preventive of Gob Fires." The meeting was adjourned for a month, in order that these subjects may be further discussed.

Colonial College and Training Farm.—The above is the title of an undertaking which has recently been promoted under most influential auspices. As may be gathered from its title, it is designed to provide youths intending to emigrate with the means of practically qualifying themselves for the novel conditions and requirements of an up-country life. The thoroughly sound and practical lines on which the project is based hold out every hope of its being a commercial success, whilst the beneficial effect that it cannot fail to exercise on the interests both of the mother country and the colonies entitle the scheme to public consideration on the ground of its national importance. An estate, which is said to be admirably adapted to the purposes in view, has been acquired at Hollesley Bay, a picturesque and salubrious portion of the Suffolk coast, and here the pupils will be thoroughly trained in all the practical details of pastoral and agricultural life. The working of this new college and training farm will be watched with great interest by all who are interested in colonial matters.

MANCHESTER ASSOCIATION OF EMPLOYERS AND FOREMEN.

FOREIGN COMPETITION IN THE ENGINEERING TRADES.

The 30th session of the Manchester Association of Employers and Foremen was opened, on Saturday, with an important address from Mr. William Mather, C.E., "On the Relation of Technical Instruction to the Progress of Engineering and Kindred Trades in the Future," before a large audience of engineers, held in the Lecture Hall of the Manchester Technical School.

The chair was occupied by Mr. Alderman W. H. Bailey (President of the association), who, in his introductory remarks, observed that in looking at the various educational institutions and what they were doing for the district, no thoughtful man could doubt that there was an enormous amount of waste energy going on in their midst by the introduction of many subjects which were utterly useless as a training for successful competition with our foreign rivals, whilst matters of vital importance to our industrial development and progress were comparatively neglected. (Hear, hear.) In the pages of one of their trade journals, he thought it was the *Engineer*, he had read a paper on the use of the steam-engine, in which the writer had pointed out that whilst there were certainly engines working with a consumption of 2 lbs. of coal per horse power per hour there were at the same time engines working with a consumption of 20 lbs. of coal per horse power per hour, which clearly proved that everyone did not buy in the cheapest market, but very frequently only where they could get the cheapest material. Technical education would do away with such ridiculous anomalies, and would enable men to economically employ the powers at their disposal.

Mr. W. Mather, in the course of his address, said it was with pardonable pride, though not unmixed with some vain glory, and occasionally with ignorance of the world beyond our shores, that some Englishmen referred to the great achievements of the mechanical trades during the last 50 years, notwithstanding that Great Britain had been notorious for the want of a common school educational system the greater part of that period, whilst as to science and art the training had only been accessible to a small minority of those engaged in industrial occupations. Our progress in the past clearly did not spring from widespread intelligence as the result of general education, nor had the possession of general education in some other countries in Europe, together with highly organised schools of science teaching, enabled them yet to surpass us in mechanical inventions and machine construction, out of which all industries and manufactures lived and moved, and had their being. We could point to the fact that steam and its properties, which had for generations been known to philosophers and experimentalists, was developed into a mighty power by the mechanical contrivances of our countrymen not specially learned or scientific. The history of the family of metals showed that until quite recent times the treatment of ores was not the result of profound chemical knowledge, yet the materials produced were in quality, for their kind, not surpassed to-day. In the first dawn of the railway system the pioneers were, in the educational sense, of uncultured minds, yet they struck out, with wonderful prescience, the true method of construction, which remains to this day of universal adoption. In the application of steam to ships, it could be shown that the first practical and commercial results were due to men whose training was not of a character which we should call scientific, nor yet equal to that of many men who preceded them in trying to make steam navigation possible. The rise and progress of the great textile industry, so far as spinning and weaving were concerned, had been mainly due to men of self education, or men comparatively unacquainted with scientific methods of investigation and discovery, though some highly cultured men contributed to the infinite number of mechanical devices which had made the machinery of the textile industries marvellous in productive power, yet simple in construction. In machine tools, the development though slow at first, after the introduction of steam power had been prodigious in recent years, displaying wonderful ingenuity, with correct principles of construction, and workmanship of surpassing skill and accuracy. Agricultural machinery, which in its effect upon the well-being of the human race, ranked next to the benefits conferred by railroads, was also an achievement of our own race, though the result of a wider spread of intelligence than prevailed at the time when railroads were started. In mining, although the field was enormously large, mechanical ingenuity had not replaced the manual work which was carried on still at great risk and under conditions that leave much to be desired on humanitarian grounds, if not to render the operations more profitable, yet the number of men known to fame in connection with mining, whose education was acquired under the greatest difficulties, was quite considerable, proving that in this, as in all the scientific industries we had achieved pre-eminence without a system for scientifically training men in great numbers to occupy the leading positions in our vast industrial undertakings. But though we must admit that this was all true enough in the past, and more particularly in the earlier stages of our industrial development, yet, if we had time to refer to biographical records we should find that scientific knowledge had, in some irregular fashion, percolated into the minds of men possessing remarkable natural gifts of observation, instinctive perception, and reflection. These faculties grasped the phenomena of Nature, sought, by crude methods probably, for the laws which produced them, discovered the great underlying causes of effects around them, and then, by a process painfully slow and roundabout, at last struck upon a great truth, which brought to light, and to the use of man, a little more of that infinite wisdom of the Creator, of which we were ever invited to partake. The characteristics he had named were essentially Anglo-Saxon, coupled with others equally important—great energy, endurance, perseverance, and, generally speaking, great physical powers. Such qualities in our forefathers, when once steam-power became a practical reality through the labour of Watt, quickly led them on to see that man was no longer to be a beast of burden, but a living soul. The vast stores of mineral wealth were unlocked by this new agency, which multiplied the power of man a thousandfold. The abundance of material made experiments easy and waste brought no fear of want. Then, the demand for each successful contrivance that replaced human drudgery and increased man's control over the forces of Nature speedily converted our country into the workshop of the world. Practice led towards perfection in the long run, however blundering and ignorantly and wastefully the progress might be achieved; skill of hand, experience, wealth, developed the practical knowledge which led up to new discoveries, and the British race, though negligent of scientific culture and methods, utilised and applied science in a certain degree for its profit upon its own resources, and for the benefit of mankind long before other nations awoke from the sleep of ages or had emancipated themselves from the yoke of oppression. Now, however, other nations were approaching us in the cheapness of their productions, in the excellence of their workmanship, the originality of their designs, the boldness of their conceptions, and economy of materials. Notwithstanding the enormous advantages we possessed was it not, therefore, true that those who were engaged in the mechanical arts should ask themselves whence came the rapid development of their less fortunate neighbours? How was it we were talking to-day about "holding their own," and "still keeping the lead" when a few years ago we were not conscious of competitions and scarcely condescended to notice the changes that were reducing the distance between us and those who entered the field long after us and heavily handicapped. He was aware that there was a Jingoism in the mechanical and engineering trades, just as in politics, and the reliance upon past achievements, with the present enormous display of our skill in every branch of mechanical industry, measured both by quantity and quality of production tended to somewhat undue exultation. But exultation for the present did not cover all that we needed to look after for the future. Moreover, looking to a certain class of engineering work it was annoying to notice the vast undertakings on the Continent, where some years back we possessed supreme away, which were now being carried out entirely by local engineers chiefly with native materials, and altogether from original designs. The piercing of the Alps in several

places by the Italians, French, Germans, and Swiss under difficulties of great magnitude and only possible by mechanical contrivances of the most ingenious description, and at a most moderate cost was a suggestive example of progress. Railway progress since the French and German War had been enormous all over the Continent, involving the erection of bridges which displayed the very best skill and highly developed scientific knowledge. In the Empire of Russia the whole railway system, already amounting to upwards of 20,000 miles, had been laid out and constructed and all rolling-stock supplied from local or Continental sources, with only a trace of English engineering to be seen here and there, although in rails, which was almost a raw material, we had been largely drawn upon. We were bound to admit that in locomotive and stationary engine building, also in machine tools, our neighbours approached us more nearly to-day than 10 years ago, and yet we possessed all the essential material conditions or natural gifts and advantages that could never be, practically speaking, reduced or taken away. The answer to the question, how was it other countries were so rapidly approaching our level? was to be found in the following conditions:—Because their scientific knowledge and general mental training, plus somewhat inferior physical qualities in their people, meagre natural resources, and limited markets, with protective tariffs and little accumulated wealth, were very nearly equal to superior energy and physical qualities in our people, enormous natural resources, world-wide markets, and great distributing power, with Free Trade, plus our scientific knowledge and general mental training. This equation was capable of being reduced to simplex terms. Let them take away what they might truly call the natural gifts from both sides, the irregularity of which was a matter of fact, statistics showing the foreigner's poverty and our plenty. They had these remaining on the one side, and on the other the factors of scientific knowledge and mental training. Out of these factors alone therefore the approach to equality which they had granted must be made. As it had been admitted that Great Britain was immeasurably superior in resources, they were bound to admit that on the foreign side they were greatly superior in scientific and mental training in order to account for the equality that at present existed. Mr. Mather then at considerable length described what was being done on the Continent in the promotion of scientific, technical, and manual training for the people, and laid down in detail the system he would have adopted in this country. In conclusion, he said that had we been more wisely governed in times past our people would have had less competition to-day, for our natural gifts with widespread scientific and artistic culture would have retained industries that had gone, and immensely developed and cheapened the productions of many that already existed. Our working people, able and skilled as they were, would have been classified by a natural law according to their natural abilities into trades best fitted to bring out their capacities. All men employed in mechanical pursuits would gravitate to them by a process of filtration through the various schools. Work would be dignified and honourable more than ever we had felt it to be, when followed with cultivated intelligence, and the rewards of merit and industry would have been enhanced. It might be, indeed he believed it would be, in the future that employers and capitalists would not derive such large profits as in the past from the staple trades of the country, but working men and able foremen would secure more regular employment, and this was as it should be. What did it matter if a few mansions the less existed, and luxuries were reduced, if the homes, the comfortable, healthy, contented homes, of our workpeople were increased ten-fold. Did we not long for the time when there should be no more crying in our streets and misery at our doors, and when the gainers of all should hold enough for the simple wants of life. Such a time could only come by the lifting up of the whole people to the level of their mental endowments, in the cultivation of which we should find that alone true progress lay, and upon which our future prosperity depended. The relation, therefore, between education, manual, scientific, and technical, and our professions and all trades was as intimate and inseparable as the soul to the body. If we were to hold the first rank in the future, and he earnestly hoped that every member of that society would in his day, and according to his powers, promote those measures that would bring such education within the reach of the humblest class in every part of this great country.

A vote of thanks to Mr. Mather for his address, moved by Mr. Thomas Ashbury, C.E., and seconded by Mr. John Craven, then brought the proceedings to a close.

THE EXPLOSION AT HELL GATE.

The explosion of Flood Rock, at the Hell Gate entrance to New York Harbour, took place on Saturday morning last by means of an electric wire from the shore of Long Island—300,000 lbs. of dynamite and rackarock were used, the rock having been honeycombed with galleries wherein the explosives were placed. The explosion took place at 11.13 A.M., and apparently has completely destroyed the rock. It is believed that, as soon as the necessary dredging is done, the greatest obstacle to navigation in the East River will be removed. The shores were crowded with people, who gathered to see the effect of the tremendous explosion. When it took place the water was violently agitated immediately near the rock, but only for a moment. An immense volume of water, with large fragments of stone and wood, rose to a height of 150 ft. to 200 ft., trembled aloft for a second, and then sank into the river. The shock was slightly felt on the shores; but a tremble was felt throughout the city and for miles away. No damage was done to the surrounding property. General Newton's little daughter, a young lady, eleven years old, pressed the button which created the electric current, and thereby caused the explosion. The engineer officers confirm the opinion that the Hell Gate explosion was a success. Hell Gate, says the *Pall Mall Gazette*, consists of a series of reefs and rocks in the East River, where they have long been a menace to vessels passing to and from Long Island Sound. The water ranges from 5 to 26 ft. in depth at mean low water. As early as 1848 it was estimated that one sail in 50 was hurled upon the rocks and wrecked; and one naval officer who was located there for two months reported that 50 went ashore during that time. The first explosion removed a reef containing about 3 acres, while the middle reef contains nearly 9 acres. Since August of last year the operations at this point have been confined to extending the galleries in the north-eastern section of the rock, comprising about ⅔ acre, and drilling the holes in the reefs and pillars for the final blast. The charging of the holes was begun during the month of July, and was completed the other day. There are nearly 4 miles of tunnelling, or exactly 21,670 ft. The longest galleries are 4 blocks long, or 1200 ft. You can walk under the rock and water a distance equal to strolling from the Battery up to Forty-second Street. In all 24 galleries of tunnels have been run from north to south. These are intersected by 46 others running nearly east and west. The tunnels are on an average 10 ft. from floor to ceiling, and 6 ft. or 8 ft. wide. The roof of the rock they support is from 10 ft. to 25 ft. thick. The rock taken from them measured 80,000 cubic yards as it lay in its original bed. The 467 huge pillars and roof that remain measure 275,000 cubic yards as they stand. In making these galleries fissures of water were met with, but these were all successfully plugged. All through these galleries are corridors. Workmen have bored holes 9 ft. deep and 3 in. in diameter. The 467 rude columns that remain have been also honeycombed with holes. Altogether their are 13,286, or one for every working day in the year for four years. These holes are being filled with dynamite and powder cartridges. One concussion ignites every cartridge. The explosive compound does not need fire to touch it. A pistol or big fire-cracker exploded in any gallery would send everything skyward. So the greatest care has been exercised in handling the cartridges. The chances are about even that one of them dropped would explode. There are 275,000 lbs. of cartridges to be handled. Placed in a line they would reach 22 miles. The previous explosion at Hell Gate was effected with 50,000 lbs.

On Tuesday night a fire broke out in the Haden Hill Colliery, Old Hill, the property of Messrs. W. Bassano and Co. Before it could be overcome three horses, valued at 75*l.*, were suffocated.

THE HAWKINS HILL GOLD MINING COMPANY.

As will be noticed in our advertising columns, the Hawkins Hill Consolidated Gold Mining Company, Hill End, New South Wales, has got into the hands of the liquidator. This was a property brought out as a company in London, in January, 1882, with a capital of 100,000*l.*, and after three years has come to grief. Here was a company that had good prospects of success if properly handled. The price paid for the property was not exorbitant—20,000*l.*, half in cash and half in shares, considering the area of ground held, and its prospects of success by further development, providing the capital and labour had been expended under the auspices of an experienced manager. Hill End, or Tambaroora, came into notoriety from its rich yields from some ten mines that held the main portion of the Hill in 1872, and some remarkable crushings took place about that time, and the total yield from this small area of ground, up to 1880, had been about 750,000*l.* The Star of Peace Claim, which was the property purchased by this company, produced about 13,762 ozs. of gold from 7428 tons of stone. The veins in this Hill were thin, but exceptionally rich in some 10 or 12 claims, but pinched out or got poorer at lower depths. There was, however, every probability of the veins making good again at further depths if properly developed. The Hawkins Hill Consolidated Company, like many other companies in India, Africa, and other places, started about that time, preferred placing the management of the mine in the hands of an amateur, and who was the vendor, instead of placing it under the management of a disinterested and practical gold miner, or taking the advice of a competent consulting engineer in London. Because a man is a good judge of tea and sugar, and a fairly good man of business in Sydney, it does not follow that he will make a good mining manager, and events proved such to be the case. Neither does it follow because a noble duke is Chairman of directors that the results of the operations will be directed to a successful issue. The retired grocer, having made a mess of mining management, and exhausted the patience of shareholders and directors, a practical miner—Mr. James Murphy—was sent out to supersede him. He had not been long on the mine, and was carrying out his work in a workmanlike manner to undo the muddle previously made, when the noble Chairman pays a visit to the mine, and begins to find fault with Mr. Murphy's mode of procedure, which naturally resulted in his resignation. Now, what the Duke of Manchester could have known about practical gold mining to cause him to interfere with the working of this mine, it would be curious to know. Had he exercised his ability as Chairman of the company to provide the necessary capital to enable the works at the mine to be efficiently carried on, according to the lights of practical men, and not according to the theoretical notions of London promoters and directors, he would have been doing his duty as Chairman of the company, and the operations would, in all probability, have been brought to a successful issue. We know the remarks made by Mr. Murphy after taking charge of the mine were that it had been "pig-rooted," and that levels might as well have been driven in the Thames Embankment for gold as in many places where the amateur fossicker had been working. This is not the only instance by a good many were fussy and meddling interference of Chairmen of directors and members of boards who wanted to make themselves important at the expense of the shareholders have brought legitimate mining enterprises to grief, and a stigma on the industry in consequence of their incapacity to understand their position and duties. We regret to have to call attention to the fact that the Hawkins Hill Consolidated Gold Mining Company has been brought into liquidation through what we deem mismanagement, and we trust it will fall into the hands of better management next time, and shareholders must understand that gold mines cannot be profitably or efficiently worked except under the direction of experienced men, and when they have such men in their service it will be advisable to be guided by their judgment in preference to the opinions of dukes, lords, or nobles of high or low degree.

Mr. John B. Reynolds writes:—The improved tone of the London Mining Market has not been so apparent this week. The "quiet" has been very marked, and buyers have been inclined to hold back, watching the course of events at home and abroad. But shares, as a rule, have not declined in value. Dolcoath, East Pool, West Kitty, Trevaunance, Wheal Agar, Polberro, and Wheal Grenville have rather hardened than otherwise, showing the confidence of holders of these securities. No doubt these shares, which are so strong under circumstances rather trying to markets of all kinds, will have a very decided upward movement in due time. No other conclusion can be arrived at by lookers on of experience and sound judgment. But this is not all. These shares cannot be bought for forward delivery excepting at prices far beyond present quoted rates. The inference to be drawn is that a considerable rise may take place at any moment, and is anticipated with certainty at no very distant date. Nor is this expectation unreasonable. The history of December, 1879, is sufficient to justify it. In fact, on many occasions the quick turn has come so unexpectedly that, whilst operators for the rise have made fortunes, the operators for the fall have lost everything. Such experience is too recent to be forgotten, and it is a fact that there is not now one single indication which does not justify very sanguine anticipations on the part of speculators for the rise. But it is only fair to say that those who buy for "time on" should be sure of being able to take up their securities. This caution is called for, because it may be that the improvement or the sudden rush may not come so soon as expected. Those, therefore, who are ready to pay for what they buy when the time comes "to take up" are certain to be right. They, at any rate, are independent of market combinations, and, indeed, can control them. Let stock, then, be taken and that freely at low prices. Every business man will understand the soundness of this suggestion. But all this, of course, only applies to good speculative mines. I reflect on none. I pronounce none "worthless." I do not insinuate that in some there is no chance of success. The worst (according to many experts) have turned out the best. But at the same time it is fair to say that many mines are proved to be out of the speculative list—at any rate, to a certain extent. What are these mines? Where are they? Those who know the writer of this article know well in what direction his finger points. It is not forgotten, by those who know what is coming, that in November, 1879, West Kittys were pronounced a swindle at 20s., and orders were sent back unexecuted by those who assumed superiority of knowledge. The *Mining Journal* for 1879 can now be read with considerable advantage by mining investors. Let the readers recollect that since then West Kittys have paid 4*l.* 18s. per share in dividends, and bid fair to pay double the amount in the not far distant future. The position of Trevaunance and Polberro leaves no doubt as to their prospects. Words are superfluous here—as they were in the case of West Kitty in 1879. If West Kitty promised well then what do the mines on the Western Hill, and its near neighbours promise now? The individual who cannot tell what to do in the present juncture is a man who will be found amongst those who would not make money by speculation under any circumstances. Those who know the A B C of business must be aware if they reflect at all what should be done under present circumstances.

FOREIGN TIN, AND THE HOME TRADE.

In the *Mining Journal* last week it was mentioned that at West Basset meeting Mr. Daubuz—a representative mining gentleman, a smelter, a large shareholder, and the practical creator of the present County Committee to consider what are the grievances and the remedies necessary in connection with mine tenure—had said that in his opinion a duty should be put on tin sent to this country by the foreigner, unless all English goods going to the foreigner were admitted duty free. It would be interesting to have the views of Cornish smelters generally on this point. It appears certain enough that the present Commission on Depression in Trade will ask Cornwall to send two or more gentlemen to London to give evidence on the subject. Mr. Daubuz has at least said Sir Massey Lopes has spoken to Lord Iddlesleigh, who cordially acquiesced in the suggestion. Who are the gentlemen to speak on behalf of Cornwall? Unquestionably the selection would be made of the few smelters; and who is it that is looked upon, from one end of the county to the other, as the father in everything pertaining to mining matters in Cornwall? Mr. T. S. Bolitho, of Penzance. Having regard to Mr. Daubuz's views, and the fact that Mr. Daubuz, in proposing Mr. Bolitho as Chairman of the recent county meeting on mining tenure, spoke of the latter's pre-eminence on the question at issue, a very pertinent anecdote is specially to the point here. When the death knell to Protection was sounded the Cornish tin smelters imagined they had to say good-bye to Cornish mining, and a deputation to Sir Robert Peel was arranged. The gentlemen were four in number, and included one of the members for West Cornwall (Mr. Michael Williams) and Mr. T. S. Bolitho. Sir Robert Peel did not personally reply to the deputation, but referred them to "my secretary, Mr. Gladstone." The matter was discussed, and the deputation left satisfied that Free Trade would not injure the industry, and surprised that Mr. Gladstone so wonderfully understood the subject. It is to be doubted that Mr. Bolitho has changed his mind. On this question of a tin duty broad issues are involved. The existence of the tin-plate trade in the kingdom would be at once challenged were a duty placed on imported tin. While it is, of course, readily admitted that there has been a long and serious period of depression, it has to be recollected that there has been depression in other countries, especially Protectionist countries, and there are many who think the causes of depression are to be traced to the exceptional, too hurried, too hasty activity of some years since. Has not America, with its Protectionist policy, sadly felt the wave of depression? Yet, Protectionist America admits foreign tin, in its raw state, free. Can Mr. Daubuz explain this away? The natural assumption of course is that, producing no tin, and at the same time desirous of fostering an industry of its own, that country opens its ports free, without the restrictions imposed on imports in most other cases. Were England, therefore, to place a duty on tin, the result undoubtedly would be not that which Mr. Daubuz desires, but the very reverse. At any rate, the tin-plate trade would go. There can be no doubt that, were America to find tin in paying quantities, in quantities sufficiently great to supply its own demands, its Protectionist policy would be maintained. But being without the tin the State astutely sees wherein is its advantage, and acts accordingly. Mr. Daubuz also spoke of the copper trade of Cornwall, complained that it had gone, and predicted the end, in the immediate future, of the tin industry in Cornwall. Did not Mr. Daubuz fail to thoroughly appreciate the fact that other countries have immense deposits of copper, and that Cornwall had lost the great producing power of the past? Even so clever a politician as Mr. Edward Clarke, M.P., made a big mistake on this question this week, speaking in Cornwall. If they had not universal Free Trade, he argued, it was necessary that something be done, and he pointed to the exports from England of manufactured copper, evidently unaware of the fact that the great proportion of that manufactured copper first entered English ports in its raw state! As Mr. Daubuz distinctly asserts that in proportion to the present free entry of foreign tin into England grievances with lords are of no consequence, it would be of interest to have his Protectionist proposals discussed by the newly-formed County Committee.

THE STEEL TRADE IN STAFFORDSHIRE.

The Steel Trade in Staffordshire, and in the adjoining county of Shropshire, is just now undergoing gratifying developments. Ironmasters are persuaded that notwithstanding that the major part of the shipping orders must necessarily be secured by steel firms upon the coast, consequent upon their lower prices, still that there is a field for inland steelworks in supplying certain home wants. Those wants largely take the form of a partially manufactured steel for rolling down in the iron mills, and which is supplanting the product of the puddling furnaces. The Lilleshall Iron Company, Shropshire, who have long been known as best pig-iron makers, are about starting a second converter at their steelworks upon the basic-Bessemer system, and are arranging for the laying down of a cogging mill. The converters are supplied direct from the blast-furnace, which is charged with a selected Lilleshall metal as low as possible in silicon. At present the metal is hammered out after being cast, but the cogging mill will soon supplant the hammer. The product is declared to be equal to Siemens-Martin steel, and is rolled down at the adjoining Snedshall Ironworks into plates, sheets, angles, and the like. Orders have lately been received for plates and angles for Sir W. G. Armstrong, Mitchell, and Co., and boilers upon the Galloway tube principle have also recently been constructed from plates of this steel. The Steel and Iron Ingot Company, Bilston, near Wolverhampton, established upon the basic system, are now by an alteration in the manner of working the converters obtaining much of the benefit of the acid process. The length of life of the converters is thereby materially prolonged, and the quality of the steel is improved. Three converters are at work, and a powerfull cogging and rolling plant, while it is in contemplation to put down two other converters. The metal is being rolled into boiler-plates for leading engineers in Yorkshire and Lancashire, and thin sheets for stamping purposes, tin-plates, tube strips, and the like. In a partially manufactured form it is likewise being sent out as blooms and billets. Mild steel manufacture as carried on mainly for sheet purposes by Messrs. Hatton, Sons, and Co., Bilston, and some other firms is also proving a success, while the Patent Shaft and Axletree Company, Wednesbury, are turning out splendid Bessemer steel, and are preparing for a trial of the basic system in the open-hearth furnace.

North of England Institute of Mining and Mechanical Engineers.—A meeting of this institute was held, on Saturday, in the Wood Memorial Hall, Newcastle, Mr. John Daglish in the chair. Professor Bedson read a paper "On the Testing of Safety-lamps: an account of Professors Kreischer and Winkler's experiments." The following is a brief abstract:—After discussing the conditions which affect safety-lamps as light producers, safeguards, and indicators, an account of the critical examination to which Professors Kreischer and Winkler have subjected the Wolf benzine-lamp, described by Mr. T. W. Bunning at the last meeting, is given. The oil consumption and illuminating power of this lamp has been determined, and a comparison of the results with those obtained with lamps in which rape oil and a mixture of rape oil and pretroleum was burnt, show the benzine lamp to be the cheapest. An account of the method employed by the above experimenters in testing the behaviour of this and other lamps in mixtures of air and marsh gas, of air and coal gas of known composition, is also described. These results it is claimed are such as to give the benzine lamp a very high place as a fire-damp indicator. The discussion was adjourned.

Provincial Stock and Share Markets.

CORNISH MINE SHARE MARKET.—Mr. S. J. DAVEY, mine share-dealer, Redruth, writes under date October 15:—Our market has been tolerably steady this week. Dolcoath shares advanced 2*l.* after Monday's 30s. dividend and excellent report, but South Frances and South Crofty do not close at best. To-day Dolcoath, West Frances, and West Kitty are chiefly in request. Following are prices:—Blue Hills, 15s. to 17s.; Carn Brea, 3 to 3¼; Cook's Kitchen, 10 to 10⅛; Dolcoath, 73⅛ to 74; East Blue Hills, 1⅛ to 1⅜; East Pool, 46 to 47; Killifreth, 11s. to 12s.; New Cook's Kitchen, ⅜ to ½; New Kitty, 14s. to 16s.; Pedn-an-drea, 1 to 1¼; Prince of Wales, 4s. to 6s.; Polberro, 1¾ to 2; South Condurrow, 6⅛ to 7; South Crofty, 6¾ to 7; South Wheal Frances, 8 to 8⅛; Tincroft, 6 to 6⅛; Trevaunance, 2⅜ to 2½; West Basset, 2⅜ to 2⅝; West Frances, 8 to 8⅛; West Godolphin, 1 to 1¼; West Kitty, 8 to 8⅛; West Polbreen, 12s. to 14s.; West Wheal Seton, 4½ to 5; Wheal Agar, 18¾ to 19; Wheal Basset 6¼ to 6½; Wheal Grenville, 12⅝ to 13; Wheal Kitty (St. Agnes), ½ to ⅝.

— Mr. M. W. BAWDEN, Liskeard, writes under date October 15:—The mining market has been quiet during the week, business being mostly confined to Dolcoath and East Pool, on favourable results of the meetings and the usual fortnightly settlement. Closing quotations subjoined:—Anderton United, 2s. to 2s. 6d.; Bedford United, 4s. to 5s.; Blue Hills, 15s. to 16s.; Carn Brea, 3⅛ to 3¼; Cook's Kitchen, 10 to 10¼; Dolcoath, 73⅛ to 74 ex div.; Devon Consols, 1⅛ to 1¾; East Blue Hills, 1⅜ to 1½; East Pool, 46 to 46⅛; Gunnislake (Clitters), 1s. 6d. to 2s.; Killifreth, 11s. to 12s.; Marke Valley, 2s. to 2s. 6d.; Pedn-an-drea United, 1¼ to 1¾; Phœnix United Mines, 1⅜ to 1⅞; Prince of Wales, 7s. to 8s.; South Caradon, 3s. to 4s.; South Condurrow, 6¾ to 6⅞; South Crofty, 6⅛ to 7; South Frances, 8¼ to 8⅛; Tincroft, 6¼ to 6⅛; Trevaunance Consols, 2 to 2⅛; West Basset, 2⅜ to 2½; West Frances, 8¼ to 8⅛; West Kitty, 8 to 8⅛; West Phœnix, 2s. to 3s.; West Seton, 4½ to 5; Wheal Agar, 18¾ to 19; Wheal Basset, 6 to 6⅛; Wheal Crebor, 16s. to 17s.; Wheal Grenville, 12¼ to 12⅛; Wheal Kitty, 14s. to 15s.; Wheal Peevor, ⅜ to ½.

— Messrs. ABBOTT and WICKETT, stock and share brokers, Redruth, write under date October 15:—The market has been steady this week, and a moderate business transacted. Dolcoath meeting was very satisfactory, and shares have recovered the dividend of 30s. East Pool steady, 46¼ to 46⅛; West Kittys firm, 8⅛; and West Frances, 8¼. Closing quotations herewith:—Blue Hills, ¾ to 1; Carn Brea, 3 to 3⅛; Cook's Kitchen, 10 to 10⅛; Dolcoath, 73⅛ to 74; East Blue Hills, 1⅜ to 1⅝; East Pool, 46 to 46⅛; Killifreth, 11s. to 13s.; New Kitty, ⅝ to ⅞; Pedn-an-drea, ⅞ to 1⅛; Prince Royal, 4s. to 6s.; South Condurrow, 6⅛ to 6¼; South Crofty, 6¼ to 7; South Frances, 8 to 8⅛; Tincroft, 6 to 6⅛; West Basset, 2¼ to 2⅛; West Kitty, 8 to 8⅛; West Frances, 8 to 8⅛; West Seton, 4½ to 5¼; Wheal Agar, 18⅛ to 19; Wheal Basset, 6 to 6⅛; Wheal Grenville, 12¼ to 13; Wheal Kitty, ⅛ to ⅜. Tin, 91.

— Mr. JOHN CARTER, mine sharedealer, Camborne, writes under date October 15:—The Cornish Share Market has been quiet this week, and except Dolcoaths, which have improved to 73½, 74½ ex div., there is no change to notice. Prices are as follows:—Blue Hills, ½ to ⅞; Carn Brea, 3 to 3⅛; Cook's Kitchen, 10 to 10⅛; Dolcoath, 73½ to 74½; East Blue Hills, 1¼ to 1½; East Pool, 46 to 46⅛; Killifreth, 11s. to 13s.; New Cook's Kitchen, ¼ to ½; New Kitty, ⅝ to ⅞; Pedn-an-drea, 20s. to 22s. 6d.; South Condurrow, 6⅛ to 7; South Crofty, 7 to 7⅛; South Frances, 8 to 8⅛; Tincroft, 5¾ to 6⅛; Trevaunance, 2½ to 2⅝; West Basset, 2½ to 2⅝; West Frances, 8 to 8⅛; West Kitty, 8 to 8⅛; West Peevor, ⅛ to ½; West Seton, 4¾ to 5¼; Wheal Agar, 19 to 19⅛; Wheal Basset, 6 to 6⅛; Wheal Grenville, 12½ to 13; Wheal Kitty, ½ to ¾; Wheal Peevor, ¼ to ½. One o'clock, tin, 91.

MANCHESTER.—Messrs. JOSEPH R. and W. P. BAINES, stock and share brokers, Queen's Chambers, Market-street, write under date, October 15: There is nothing of very special moment to chronicle either in transactions or changes in quotations in a review of the markets for the past week. Whilst there has not been much activity owing in some degree to the attention required by the settlement the balance of movement in the foremost markets is, if any thing, favourable, this remark applying more particularly to home railway stocks, which beginning, in the period under notice, weak, and tending lower, have during the latter few days gone rather better, resulting as we have said in a slight general upward movement being to be noted. The change for the better is attributed herein to some little improvement in traffics, and the hopeful view taken of the Roumelian question at any rate, so far as its development is likely to affect this market. Consols do not provide a similar record, as after being quoted turn higher, they now stand without change compared with Thursday last. Colonial Government bonds, &c., exhibit very little alteration amongst those quoted here, the only change being a fall of ⅛, in Cape of Good Hope Five per Cent. 10-40. Home corporation stocks and debentures, though without variation evincing any distinct change of tone, show actual decline of ¼, in Liverpool 3½ per cent., and of ⅛ in buyers, offers for Manchester Four per Cent. stock, the others quoted here being steady and unaltered. Foreign Government loans, &c., mark an adverse majority of change in values, but nowhere is to be found any remarkable depreciation. Those stocks which may reasonably be expected to be associated most closely with the Eastern question in its many ramifications have, however, come in for the major portion of what decline has taken place. Egyptians are lower, Unified ⅜, Preference ⅜, and Daira Sanieh ⅛ to ¼. Turkish (group four) ¾, Russians (1873) ¼, Spanish ¼ to ⅜, Italian ⅛, and Mexican Three per Cent. (1851) ¼. On the other hand Peruvians Six per Cent. (1870) and Five per Cent. (1872) and Portuguese are each ¼ higher. Argentine Hard Dollar bonds, after quoting 1 lower, have recovered to figures same as last week. The miscellaneous business marked during the week is pretty fairly distributed amongst the several classes grouped under that head, and including miscellaneous proper, and in many cases the dealings have been for cash to adjust accounts during the account which has been in progress since Tuesday to to-day inclusive.

BANKS are credited with but few transactions, which in view of the record of revision of quotations would appear to mean strength in tone and tendency. Partial changes—Consolidated sellers price 1/16 better, and Lancashire and Yorkshire buyers offers ⅛ down, but in no instance is actual fall on both quotations to be reported, whilst the following are higher—Manchester and Liverpool District, ¼; Union of Manchester, ⅛ to ¼; Liverpool Commercial, ¼; Bank of Liverpool, ⅛; Manchester and Salford, ⅛; and Parr's, ⅛.

INSURANCE shares beyond some fairly free dealings in Lancashires have changed hands to but a small extent. Quotations show changes irregular, and not noteworthy.

COAL, IRON, &c., AND MINING.—The only item worthy of special mention is a distinct gain exhibited in price of John Browns, which are 2½ better. Beyond this the changes are mostly unfavourable, though not severely, so in any single concern. Business passing herein is very small indeed.

COTTON SPINNING, &c., shares do not maintain best points recently touched, but the falling off is very slight; and, considering the present prospects of the trade, it is somewhat surprising that values remain as they are, except it is from the belief that at present figures many shares are worth buying or holding, with the full prospect of having to wait for some time for return the advantage regained when the turn comes, being expected to pay for the delay.

TELEGRAPHS all better, but without transactions here.

TELEPHONES.—Business brisk in Lancashire and Cheshire New (on letter), and for old prices about steady.

MISCELLANEOUS.—Manchester Carriage, A and B, issues higher. Other changes in locals not of importance.

RAILWAYS.—On Friday and Saturday last dull and drooping, since then tone more favourable, and balance of movement for week slightly better, traffics to some extent helping the higher tendency. In Canadians Trunks, notwithstanding another large traffic decrease, are sensibly higher on the week. Americans, though oscillating, pretty much as usual, are generally better on balance, the past day or two having turned the scale in this direction. Mexican Rails traffic 2200*l.* decrease, but quote better than Thursday last.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, stockbroker and ironbroker, under date October 15 writes —During the past week the markets have been quiet, and prices general lower, owing to the unfavourable Board of Trade Returns, and the unsettled state of politics in the East. Trade prospects, however, are not considered unfavourable, and as the Money Market is easy, the depression may come to an end before long.

In shares of coal, iron, and steel companies prices do not show much alteration. Chapel House offered; Bull's Iron are at 5s. to 6s.; Clyde Coal, 44s.; Ebbw Vale, 4⅞ to 5; Marbella, 44s. 6d.; West Cumberland, 67s. 6d. to 72s. 6d.

In shares of copper mines a fair amount of business continues to be done. Tharsis declined to 75s., but have recovered to about 77s. Rio Tinto has announced an interim dividend of 6s. per share, to be paid November 3. Arizonas, 7s. 6d. to 8s. 6d.; Huntington, 4s.; Mason and Barrys have improved from 7⅛ to 7¼; Panulcillo, 35s.; Rio Tinto, 8⅝.

In shares of home mines business is very quiet. The continued depression in the metal markets keeps prices from improving. In some cases, however, they are now at points at which there is not much risk in investment. D'Eresby Mountains, and Grogwinions offered. Carn Brea are at 1s. 3d.; Devon Friendships, 7d.; East Blue Hills, 25s. 3d. to 28s. 9d.; Frongochs, 2s. 6d. to 5s.; Gorsedd and Sinclair, 5s.; Great Holway, 15s. to 20s. Goginan, 1s. 6d.; Hollywell District, 8s. to 10s.; Leadhills, 40s. to 45s.; New Trumpet, 5s.; North Blue Hills, 5d. to 9d.; North Busy, 1s.; North Treskerby, 12s. 6d. to 17s. 6d.; Parys, 5d.; Rhosesmor, 11s.; Van, 27s. 6d. to 32s. 6d.; and Weardale, 25s. to 27s.

In shares of gold and silver mines prices have in some cases improved. Montanas declined from 48s. 9d. to 41s. 6d., and are now about 45s. Tecoma Debentures offered, and Kohinoor Debentures wanted. Appolonia are at 1s.; Anglo African Diamond, 17s. 6d. to 22s. 6d.; Almadas, 2s. to 3s. 6d.; Balkis, 6d.; Cankim-Bamoo, 1s. 6d.; Cartago, 3s. to 4s; Callao Bis, 4s. 6d. to 5s.; California, 2s. 6d. to 3s. 6d.; Devala Moyar, 4s. 6d. to 5s. 6d.; Glenrock, 7s. to 8s.; Hoover Hill, 4s. to 5s.; Indian Consolidated, 3s. 9d. to 4s. 3d.; Kohinoor, 2s. to 3s.; La Trinidad, 77s. 6d. to 82s. 6d.; Mackay and Revolution, 5s. to 10s.; New Albion, 27s. to 32s. 6d.; Nine Reefs, 2s. to 3s.; Nouveau Monde, 1s. 9d. to 2s. 3d.; Ooregum, 2s. 6d. to 3s. 6d.; Ruby, 4s. 6d. to 5s. 6d.; SchwabsGully, 60s. to 65s.; Silver Chord, 12s. 6d.; and Victoria, 2s. 6d. to 3s.

In shares of miscellaneous companies there has not been much business doing. Oil companies shares generally easier. Home Mines Trust, 12s. to 14s.; Lawes' Chemicals, 4¾ to 5¼; Langdale's Chemicals, 60s. to 65s.; Phospho Guano, 50s. to 55s.

EDINBURGH.—Messrs. THOMAS MILLER and SONS, stock and share brokers, Princes-street, write under date October 14:—Most home railway stocks have been quiet during the past week, and the changes in prices have been moderate. Highland, however, has been offered down to 91—a fall of ¾—without business resulting, and Brighton Deferred is about 1 lower. Canadians have advanced, but the amount of business in them has not been large. Americans have improved, with the exception of Readings, Ontarios, and Wabash, which have receded. Clydesdale Bank have receded 5s., Royal 60s. North British and Mercantile Insurance have risen 2s. 6d. Northern have declined 7s. 6d., Royal 5s., Scottish Union 6d. British and New Zealand Investment shares have fallen 2s. 6d., to 20s.; North British Canadian Investment, 1s. to 32s.; Scottish American Investment 2s. 6d., to 61s. 6d.; Prince and Swan Cattle shares have both declined, the former to 86s. 6d., and the latter to 5 11-16ths. Tharsis shares, after falling 3s. 6d., have recovered. The changes in oil shares have been few and unimportant. Assets shares, after falling to 5, recovered to 6, from which they have again declined to 5⅝. Edinburgh Tramways have receded 2s. 6d., to 11¼.

American Mining Notes.

(FROM OUR OWN CORRESPONDENT.)

NEW YORK, SEPTEMBER 30.

Another step has been taken in the direction of the settlement of pending and of possible railroad wars by the inauguration of negociations between the Pennsylvania and the Baltimore and Ohio railroads. The latter after a long contest had gained access into Philadelphia, and was known to be manœuvering to get an independent line into New York. While these two mighty corporations were in arms ready to come to close quarters at any moment, far-seeing men had little faith in the much-talked-of peace among the railroads. Now that an arrangement is being discussed, and an alliance seems probable, the combined forces of the New York Central, the Pennsylvania, and the Baltimore and Ohio railroads can decree that there shall be peace, the ruinous rates will be withdrawn, and business will return to safer channels. The talk of a coming "boom" has now entirely disappeared. Nobody reports anything beyond a fair fall trade, and while the majority look hopefully into the future, there are a few who profess to have doubts as to the coming winter. Your correspondent gathers the general impression that we are decidedly gaining from day to day. We may have a few set backs; but, on the whole, the situation is very sound and healthy, and promises well for the future.

In the coal trade there has been that improvement which naturally comes from the "fall" demand for coal for domestic purposes, which after all takes by far the greatest percentage of our anthracite. In iron the tone is one of greater confidence; but, looking over the whole ground, there has been no improvement in prices. Steel rails, nails, sheet-iron, and wire are all higher, but in each of these specialities the advance is due to special circumstances. In metals copper is quiet so far as our own market is concerned. The decline in Chili bars is looked upon as the natural outcome of the fall in silver. The course of the latter metal is of course the subject of endless discussion. The Eastern States are solidly opposed to further compulsory coinage, and the administration is committed to the same end. But it will not do to infer from the fact that the opponents of suspension of coinage of the Bland dollar are very quiet that their power has declined. They had a clear majority in the last Congress, and their phalanx may prove unassailable again. The Warner Compromise Bill is being violently assailed as absurd, and seems to have only a slight chance.

Lead is holding its own wonderfully well, and the Richmond Company has made sales last week of about 500 tons at 4·25 cents. The speculator who handled the advance is doing remarkably well, considering that in the memory of the trade lead speculation for a rise has always hurt the parties who tried to engineer it.

Mr. Curtis, the geologist, who made the brilliant report on the Eureka district in Nevada for the U.S. Geological Survey, has resigned from the Survey, and will devote himself to the practice of his profession, as consulting mining engineer, with headquarters at New York.

A number of members of the American Institute of Mining Engineers, who have returned from the recent meeting at Halifax, speak in the most enthusiastic terms of the lavish hospitality of the Nova Scotians, and are deeply impressed with the resources of that part of Canada. They were certainly given every opportunity to examine them, and to note the methods adopted to utilise them. In return, the greater part of the Sessions was devoted to the reading of papers bearing directly on the industries of Nova Scotia. Mr. J. H. Bartlett, of Montreal, presented a paper "On the Manufacture of Iron in Canada;" Mr. H. S. Poole, an able mining engineer, of St. Martin, described the characteristics of the Picton coal field; Mr. R. G. Leckie, of Spring Hill, took up the coal fields of Cumberland County, Nova Scotia; and Mr. W. Routledge, of Sydney, Cape Breton, presented a paper "On the Cape Breton Coal Field." Mr. E. Gilpin, Nova Scotia's energetic Inspector of Mines, spoke on the gold mines. The engineers had an opportunity to visit one of the marvels among the Nova Scotia producers of the precious metal, the Montague Mine, which happens to be in bonanza at the present time.

A bushel of ore was exhibited there, which, according to the testimony of one of my friends, who has worked for many years in California, exceeds in richness anything he ever saw on the Pacific Coast. From the middle of June to the middle of September this little mine turned out nearly $34,000 worth of gold. It has always been a matter of surprise to me that Nova Scotian gold mines have not attracted more than they have the attention of English investors. One of the reasons, I take it, is that there are not there the elements for floating great companies which are expected to prove a bonanza to the promoter before ever a shot is fired in the mine, or a stamp has dropped. The veins are small, and are pockety, but on a moderate outlay, cautiously managed enterprises, in which all modern improvements are made available, ought to do well. That, at least, has to some extent been the experience of one or two American companies. They did not go in with the expectation of making more than a moderate return on a moderate risk. I cannot do better, in order to give your readers a good general idea of the Nova Scotian gold fields than to quote from the address of Mr. Gilpin:—"The gold fields of Nova Scotia stretch along the Atlantic shore of the Province from Yarmouth to the Strait of Canso, a distance of over 200 miles, in some places 40 miles wide. The country underlaid by the auriferous strata and associated rocks is rough, and generally unfitted for farming, so that it is comparatively unexplored. The total area has been estimated at from 6000 to 7000 square miles, about one-half of which is occupied by granitic rocks. The exact age of these measures has long been a vexed question among the provincial geologists, and is perhaps not yet positively settled. They may be roughly divided into two sections. The upper one is composed principally of black slates, frequently pyritiferous, with beds of quartzite and veins of quartz. The lower section is made up of alternating beds of quartzites, fine and coarse, and frequently felspathic, and grey and bluish-black slates, sometimes magnesian, and holds numerous veins of quartz. The thickness of the upper section has been estimated at 3000 ft., and that of the lower section at 9000 ft. The veins in the upper section, though frequently auriferous, have not yet proved of economic value. The veins worked vary in width from half-an-inch to 6 feet, the most common thickness being from 4 ft. to 6 in. The quartz is usually crystalline, and fairly friable, but also oily and compact. The gold occurs in coarse sights, and in minute grains and films in the associated pyrites. The miners rarely crush quartz unless it shows free gold. The minerals associated with gold are iron pyrites, mispickel, galena, copper sulphides, and blende. Calcspar is also found, but in some cases it has been observed that the gold diminishes as the proportion of spar increases. Galena and copper pyrites are considered by a great many miners to hold out the best promise of economic amounts of gold. The veins afford many good examples of chimneys or pay streaks. Their width, dip, and downward extension are of the most varied form. The greatest depth of pay streak that has been worked here is 600 ft., and a horizontal length of 300 ft. may be considered a maximum. Low-grade ores have been profitably crushed in small mills of eight to 20 stamps, but no systematic attempt has yet been made to work them on a large scale and as a regular operation.

There is little novel about the mining and milling systems, and they may, speaking generally, be described as rough-and-ready methods, adapted to small veins and a corresponding capital. The shafts are invariably sunk on veins which dip at all angles from 45° to the perpendicular. Stopes are started at all depths, and carried direct from the shaft underhand in steps, and part of the rock is stowed on the following scaffolds. Few shafts exceed 200 ft. in depth, and the workings seldom extend much beyond the pay streak. The mills claim no striking originality in pattern. Exact figures of the amount of gold saved cannot be given. About 15 per cent. of the free gold is lost, and little of the gold held in the sulphides, &c., is saved. The amount of the sulphides, &c., varies from 1 to 60 per cent. in the quartz veins, and their gold values sometimes run $4000 to the ton, but I presume that from $40 to $50 would represent their average value. A few small lots have been concentrated and shipped to Swansea, but the problem of the tailings has not yet been solved in Nova Scotia.

The cost of mining per ton varies greatly with the hardness of the incasing rock and the size of the vein. It may be put down at 50 to 70 cents for the open-cast low grade workings, and from 95 cents in narrow slate belts up to $15 in narrow veins. The value of the ore crushed varies from 3 dwts. to 4½ ozs. per ton; the average annual value has fluctuated between 10 dwts. and 1 oz. 2 dwts.; the total amount crushed since the year 1862 is (from official returns) 495,923 tons, yielding 366,976 ozs., an average value of about 14 dwts. In conclusion, I may remark that the gold ores, are the property of the Crown, and are leased for revenue purposes. The areas are 150 by 250 ft. in size, and any number can be leased on payment of a fee for the execution of the papers. The royalty is at the rate of 2 per cent. on the gold, valued at $18 an oz., and is paid by the mill owner, who is obliged to take out a license and to make regular return of his work to the Mines Department. The areas are bounded by vertical lines, and laid out as nearly as possible along the general course of the veins of the locality they are applied for."

WATSON BROTHERS MINING CIRCULAR.

WATSON BROTHERS,
MINEOWNERS, STOCK AND SHARE DEALERS, &c.,
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Mr. Daubuz should be heartily thanked, in our opinion, in having the courage to express his conviction that there should be a duty on tin. We will go further, and say let us have one also on copper and lead.

In the *St. James Gazette* of Saturday last there was a letter on Lead Mining that puts this forth very strongly and clearly. Prior to 1870 England mainly supplied all the lead she wanted; then it commenced to fall steadily, and by 1880 it had reached starvation point. From this latter date the stoppage of lead mines has thrown 30,000 miners out of employ, making, as the writer says, with their families at least 60,000 more, thus seriously affecting at the same time the owners of the houses they lived in, the tradesmen who depended on their custom, the capitalists whose money (vast in amount) was sunk in opening out the mines, and in the machinery for working them. The main cause of all this is stated to be the fact that lead comes into the country, particularly from Spain, free of duty. Last year 109,000 tons of ore were imported, being 7300 tons in excess of 1883; and of this large quantity Spain sent 86,200 tons, or more than 5300 tons over the previous year. Spain does not admit any English goods without a prohibitory duty, but protects herself, as many other states do, by protection duties. Thus she pauperises thousands of our own industrious population, and causes an enormous loss of capital. England, it is said, wants just as much lead as ever for her own use, and formerly raised it, and had besides some left for exportation. Now nearly all has to come from abroad, and the result has been to reduce ore to half its price. Yet, and here is the singular part of it, not only as regards lead but copper and other metals, the prices of manufactured articles that we have to buy are not nearly down so much in proportion as this ore.

A correspondent wonders why the standards for tin ores in Cornwall have remained stationary since the 10th August, while so many fluctuations have occurred during the same period in tin. At the present standard there is a difference between the price of tin and the price paid to the miner for ore of 11*l.* per ton, which gives a fair margin of profit to the smelter.

The south lode of East Pool would seem to run through the north part of Tincroft. The north lode directly runs through South Crofty, and it is upon this, we presume, that the shares have advanced from 3*l.* to 7*l.* East Pool was formerly a copper mine, commenced working rather more than 50 years ago, and upon an outlay of 5*l.* per share (on 128 shares) sold copper ores for 130,000*l.*, and divided upwards of 30,000*l.* profit, down to a depth of 90 fms. In the year 1842 the copper ores sold (2943 tons) realised 21,172*l.*, showing how rich it was. We bought East Pool shares largely for our clients at low prices more than 40 years ago, and knew the mine well. Afterwards it became poor for copper, and in its transition state from copper to tin was a heavy drag upon the shareholders for some years. It is now one of the richest tin mines in Cornwall, and paying over 30,000*l.* a year profit. Knowing what this mine was and also what most of the other tin mines were in their transition state from copper to tin—for Dolcoath, Cook's Kitchen, South Frances, the Bassets, and others all passed through the same ordeal—gives us the confidence we have in Prince of Wales, which may become as rich or richer for tin ere long as it formerly was for copper.

At East Blue Hills the lode is assuming a more perpendicular dip in depth, which, the agent writes, is a favourable feature. The north part of it is not now in the shaft. The two ends have been driven 8 fathoms in the month, worth 8*l.* to 10*l.* per cubic fathom.

At Prince of Wales the 102 east, where the wolfram was found, has been opened out; the lode is 5 ft. wide wolfram and tin, the latter being worth 7*l.* per fathom.

"Constantinople."—We hope to enter on the subject of returning charges next week.

THE GOLD AND DIAMOND FIELDS OF SOUTH AFRICA—No. XXIV.

BY THOMAS COLLINGWOOD KITTO, M.E.

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Pilgrim's Rest proper is a long narrow creek running up between two very high hills from the Blyde river in a south-easterly direction. Gold has been found at intervals from the top to the bottom of the creek, a distance of from 2½ to 3 miles. The hills are composed principally of clay-slate, bands of chert, slaty sandstones, and trap rock. Some of the basaltic columns which are found on the tops of some of the hills are so regularly jointed that they present the appearance of some great ruined works of art, and in many places they look like the tumble-down walls of houses; but geologically speaking this formation is rapidly disappearing. While the degradation of the hills has been perpetual, the annual rain has deepened the channel leading down through the creek to the Blyde river, so that the whole of Pilgrim's Rest Creek is one of Nature's best constructed sluices. The enormous trap rock boulders which have fallen from the tops of the hills and lodged in the bed of the creek have been the ripples provided by Nature for catching the gold. All the diggers who have worked at Pilgrim's rest know that most of the gold which has been found there has been taken from beneath those enormous boulders, but as to how it got there very few stopped to enquire. Of one thing I am certain—that wherever those boulders fell into the water-course and dammed back the water there the gold and iron accumulated for periods, while the lighter portions were carried down to the Blyde river, and eventually into the sea. The above facts will show the reason why Pilgrim's Rest acquired the reputation of being a patchy gold digging. For the information of the uninitiated I may point out that a patchy digging means that while one man is working in a place 20 ft. square earning 50*l.* per day, other men may be working all around him as thick as ants, and not earning a sixpence. The gold which has been deposited in the creek in such patches has been given off from small veins, varying from the thickness of a sheet of paper up to several inches, which are to be found pretty equally distributed throughout the whole formation for the length and breadth of the entire creek. I believe that during the wasting and washing out of the rock matter in the Pilgrim's Rest valley as much of the gold was caught in Nature's sluice (the creek) as it would be possible to save at the present day with our most modern appliances. It would, therefore, be a very easy matter by measuring the cubic contents of the valley which has been excavated by Nature to determine whether the amount of gold caught would be sufficient to meet the expenses of removing a corresponding amount of rock by modern mechanical appliances. One great mistake—if it is a mistake—which has been made by certain persons calling themselves experts who reported on those fields for companies is that they have tested samples from the creek, and valued the whole of the locality accordingly. It will be impossible to make a greater mistake, because as I have shown above the stuff in the creek is merely the concentrations from the many millions of tons which have passed through Nature's sluices from the degradation of the surrounding hills. I do not say for a moment that there are no places on the Pilgrim's Rest estate richer than the one I have referred to; but up to the time of my inspection that was the place which had produced nearly all the gold, although it was then considered pretty well worked out, and most of the diggers that were left were exploring one or two places on the tops of some hills not far away, some of them with a fair amount of success. The formation in which the gold was found on the tops of the hills was called by the diggers, "Rotten Reef," which was found lying on a soft clay-slate formation altogether out of the original position in which it was formed. Judging from the local characteristics of the place I am fully satisfied in my own mind that those deposits of quartz in their original position formed large gash veins, which dipped more or less at an angle of about 40 degrees. The disintegration of the containing rock of the under or footwall side of the vein being more rapid than on the hanging-wall side, the vein formed an escarpment until the base was so much undermined that it fell into the irregular position in which it was found by the diggers. When I saw these displaced or rotten reefs the diggers had sunk through them in several places, and had proved them to be from a few feet up to 30 ft. thick. On an average about 1-20th part only of each of these reefs was auriferous; but as the whole of the gold was concentrated in one leader it was easily procured at a good profit. The mode of working adopted by the diggers was rather rude, but it was certainly well adapted to the requirements of the place. The leader which carried the gold varied from 8 or 9 in. up to 20 or more inches in breadth, and owing to the decomposition of the iron pyrites which it formerly contained it was ferruginous and ochreous in colour, and as distinguishable from the big body of unproductive white quartz which overlay it as the wainscotted skirting of a London office is distinguishable from the painted or whitewashed wall above it. There is no doubt but what this brown leader for an average breadth of 18 in. would yield 2 ozs. of gold per ton, and picked samples would give a great deal more; but as I remarked above the 28½ ft. of white quartz overlying the auriferous leader would scarcely yield a trace of the precious metal. It will, therefore, be as plain as a pikestaff to any person of ordinary intelligence that if the whole body of quartz be broken indiscriminately and treated altogether, it will not assay 2 dwts. per ton, and will yield in being treated on a large scale less than 1 dwt. There is not a shadow of doubt but what in valuing the claims the experienced old diggers got very much the whip-hand of the inexperienced experts by getting them to value the whole body of quartz simply from the results which were obtained from sampling the leader alone, thus teaching companies the severe lesson that mere theoretical favourites have very little chance in the mining world when pitted against practical men who have made mining a life study. In working their rotten reef claims the old diggers took good care to treat nothing but the payable leader. When the big body of white worthless quartz was sufficiently firm to admit of it they worked out the payable leader by means of small shafts and tunnels; but when the worthless quartz was too rotten (insecure) to admit of its being tunnelled with safety, the whole body of stuff had to be removed from the surface down to the leader. In this way they frequently had to remove by hand labour from 60 to 100 tons of worthless quartz in order to get 3 or 4 tons of pay ore (2 ozs. per ton).

Most of the gold in the payable leader was very fine, and, as the quartz was very much burnt and honeycombed, the gold was easily separated from the ore by merely sifting it in large tubs of water, of which some of the diggers had a score or more. The coarse honeycombed quartz which did not pass through the sieve was thrown on one side, with a view of being stamped when a sufficient quantity had accumulated to warrant the erection of a small stamps. This honeycombed quartz, after being washed, contained a little gold—in fact, the diggers informed me that it contained several ounces per ton; but a fair average of the whole heap which I took away with me gave from 10 to 15 dwts. per ton.

When I visited these diggings in May, 1881, the diggers were working under a similar code of rules to those universally adopted in Australia and California, and there was no talk of concessions or depriving the diggers of their rights; they were, therefore, justly entitled to sell their claims to any firm or company the same as those in any other country. On the whole of the estates I saw only nine claims that I considered worth the attention of a company. Two of those claims belonged to the Brothers Lockhead, three to Prettijohns, and four to Hugo and Vernon. On the claims of the latter a small 5-head stamps was being erected. This ill-starred piece of mechanism stood for a long time as a rusty memento of the Graskop failure; it was first erected by the late highly-respected Mr. Armfield, and was eventually purchased by Mr. Hugo for 175*l.*, and erected by him on his claim at Brown's Hill. Small as this stamps was it was, in my opinion, quite equal to the requirements of the place as I saw it.

A month after I left Pilgrim's Rest I received a letter offering me the above nine claims for the sum of 60,000*l.*—50,000*l.* was to be paid in cash and 10,000*l.* fully paid-up shares in a company. The letter, which is before me, goes on to say—"There is now 5000 tons of payable quartz broken, which will yield at the lowest estimate 3 ozs. per ton." I estimated the quantity to be treated to be from 350 to 400 tons, and the quality to be from 10 to 15 dwts. per ton. It must be remembered that this was after it had been washed in tubs. I commenced negociations with the diggers on behalf of some gentlemen in London, with a view of forming a company; but I pointed out to the diggers that before I could recommend a company to give 60,000*l.* for their nine claims it would be necessary for me to make certain systematic trials, so as to be absolutely certain of the value of what we were buying, but before this could be carried into effect the pious Boer Government had caught sight of "Naboth's little vineyard," and grabbed it with all the unscrupulousness of Jezebel. But as sure as the sun shines the Nemesis which followed that wicked woman to the bitter end is following close on the heels of all those who were instrumental in depriving the few poor diggers of the Lydenberg gold fields of their just rights.

GOLD MINING IN VENEZUELA.

(From *Truth*.)

This is not the first time that I have had occasion to discuss the affairs of this most disreputable Republic on the American continent. The repudiation of its debt is now a scandal of old standing, but the attempts of Venezuela to extract money from the pockets of the British investor were by no means put an end to by that act of spoliation. I say Venezuela, though Venezuela, in this case as in all others, means the President of the Republic and a little knot of generals, his supporters and whilom rivals, all gifted with strong predatory instincts. They plunder the Indians and half-breeds, by which the country is chiefly inhabited, at the same time, however, preferring to dispoil the foreign capitalist. I do not here wish to enter into a discussion of the reign of terror which General Pulgar inaugurated a few years ago in the State of Guayana, of which he was appointed Military Commandant by Guzman Blanco, then President of the Republic. The part which Pulgar took in the launching of the Potosi and Chile Mines was fully discussed in *Truth* in July, 1881, when I also entered into the social and political condition of the country. Little change has been wrought in this lamentable state of things. A half-breed and nominee of Guzman Blanco is now President, but lawlessness still obtains to an almost incredible extent. Investments in Venezuela must under these circumstances be attended with extraordinary risk, and as British capital is again sought for this purpose it will be instructive to enquire into the past history of some of the mining ventures in which British capital has been sunk. The opportunity is all the more favourable, as Guzman Blanco, the late President, is at present favouring this country with his presence as Minister Plenipotentiary, at the Court of St. James's, of the Republic of Venezuela, and will therefore be able to afford valuable information on the subject.

On November 5, 1867, Mr. J. B. Austin, Consul of the United States of America, resident in Venezuela, obtained from the Government several mining concessions, numbered one to 10. In 1871 these concessions were revalidated, and Mr. Austin paid down to the Government a lump sum to exempt them from all dues for the term of 50 years. Subsequently the concessions, with the exception of No. 9, came into the possession of the Nacupai Gold Mining Company, an English company, and No. 9 into that of Mr. A. H. Nicholson, an Englishman engaged in mining operations in Venezuela. Litigation arose between the Nacupai Company and Mr. Nicholson, and whilst this was going on, the whole of the titles to these concessions, including the receipt for dues necessarily deposited with the Government, mysteriously disappeared from the Government Archives, and on March 31, 1884—Guzman Blanco being President of the Republic—the Executive Council passed the following extraordinary decree:—

"Resolved, as it has resulted that, with regard to the titles of the mining concessions granted to Senor J. B. Austin in virtue of a contract entered into with the General Government on Nov. 5, 1867, that no proceedings have been taken for the exploitation in accordance with the spirit and letter of the Code of Mines of 1854, to which the said concessions were subjected, the President of the Republic, with the affirmative vote of the Federal Council, has resolved on the date of the 11th of the present month to declare, as it actually does declare, lapsed the concessions No. 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 in which were divided the 400 mines conceded by the Government to J. B. Austin in the contract above cited. Let this be published and communicated to those interested. For the Executive Council,

M. Carabano."

This was followed by a decree of April 14, 1884, as follows:—

"Having taken into consideration in the Cabinet the Petition of Senor General Andres Simon Ibarra in which he demands the 400 mines which belonged to Senor J. B. Austin denominated Austin No. 1 to 10, which were declared lapsed by the Resolution of the 31st March last, and because it is an exceptional case he be exempt from fulfilling the requisitions established in Articles 12, 13, and 16 of the decree of the 15th of November, 1883 (the Code of Mines) and receive in consequence a definite title to the aforesaid mines. The President of the Republic with the affirmative vote of the Federal Council has thought good to accede to the said Petition, and in view that no new discovery is treated of and that the requisites of the law have been fulfilled, exemption is granted to the Petitioner. Let this be communicated and published. Signed for the Federal Council,

M. Carabano."

The Articles in the Code of Mines from which Senor Ibarra's concession was to be exempt are as follows:—

"Art. 12.—In the register to which reference is made in the former article shall be inscribed in the order of their presentation the petitions for mining concessions which may be brought before the Federal Executive, note being taken of the day and the hour on which each respective petition may have been presented. These formalities having been fulfilled public notice will be given of the same once in the Official Gazette.

"Art. 13.—Those who think they have the right to oppose those who have introduced petitions for mining concessions in virtue of the two preceding Articles are entitled to present their counter petitions at the office of the Minister. These petitions will also be registered in the order of their presentation with a note of the day and hour when they were introduced and as the only notification to those interested these petitions will be published in the Official Gazette three times in one month.

"Art. 16.—In every petition for mines which is brought before the Federal Executive will have to be expressed the number of mines which are demanded, the state, district, parish, territory, or colony in which they are situated, the name of the engineer or public surveyor who has made the measurement and the respective plans; which acts will have to be carried out, notice having been given which will be published in the Press for the knowledge of those who own the adjoining concessions who may be present during the survey. Only the plans made by the civil engineers and public surveyors who have their diplomas will be admitted as authentic, and will have any legal effect in the matter of measurement and plans with regard to mining titles."

On the 8th of March, 1884, judgment was given in the Superior Court of the Federal district of the United States of Venezuela, confirming two anterior judgments which had been given in favour of Mr. A. H. Nicholson, who was in legal possession of Austin No. 9 (a mine from which a quarter of a million sterling of gold has been taken within the last three years). The publication of this judgment was, curiously enough, not allowed to take place in the Official Gazette until after Guzman Blanco had taken his departure for England as Minister Plenipotentiary to the Court of St. James's. Andres Simon Ibarra, the gentleman to whom the whole of the Austin concessions had been granted, in direct violation of the Mining Code of Venezuela, was the brother-in-law of His Excellency Guzman Blanco, who styled himself in all official documents as the "Illustrious American, Regenerator, Pacificator, and President of the United States of Venezuela." On Guzman Blanco retiring from the Presidency and becoming Minister Plenipotentiary to England, his brother-in-law, Ibarra, entrusted him with the negociation and sale of these confiscated Austin concessions either in London or Paris, but, fortunately for the illustrious, Ibarra died about a month after the departure of Guzman Blanco from Venezuela. The regard which the "Illustrious American" had for the living representatives of his defunct brother-in-law is shown by the fact that the Executive Council passed a decree dated Nov. 16, 1884, declaring all the concessions granted to Andres Simon Ibarra forfeited for non-payment of dues, and granting the concessions directly to Guzman Blanco himself. It is indeed a flexible law which can bend itself to the benefit of Presidents and their friends, while ousting the foreign capitalist from his property. But, perhaps, Guzman Blanco can furnish some explanation of what to an ordinary English mind would appear an act of the grossest spoliation. I shall be only too glad to afford the "Illustrious" an opportunity of giving his version of the transaction. Such a manifesto on his part appears, in fact, imperatively called for, as English purses are for the second time paying for these self-same concessions. Guzman Blanco has succeeded in placing two of them—Nos. 8 and 9—with the New Chile Gold Mining Company (Limited), in consideration of receiving 30,000*l.* in cash and 50,000*l.* in shares. What he may achieve with the other eight cannot as yet be determined, for it will probably depend on the squeezability of the New Nacupai Company. The experiences of British investors in the gold mines of Venezuela have been very unfortunate. With the exception of one or two, in which, strangely enough, some "Illustrious Americans" still hold an interest, they have yielded very unfavourable results. To this must be added the risk of a change of Presidency, which, in the present state of the law in Venezuela, is evidently likely to upset the rights of property previously obtained. How under these circumstances the New Chile Gold Company could make their purchase, which must at the best be fraught with all the dangers of protracted litigation, is more than I can tell. Guzman Blanco, it is stated, has a pocket full of concessions with which he is anxious to part for the benefit of the British investor. The Puerto Cabello and Valencia Railway Company, just registered, is evidently based on one of these, and others are to follow. Unless, however, General Antonio Guzman Blanco can give a satisfactory explanation of the Austin transaction no sane man would invest in a single one of these Venezuelan schemes, which are singularly wanting in the most elementary conditions of security. The "Illustrious" is, I understand, a candidate for the next Presidential election. But supposing he or his party come off second best, what will become of the "Illustrious" concessions?

THE MINES AND REDUCTION WORKS OF BUTTE CITY, MONTANA.—No. I.

BY E. D. PETERS, JUN.

The Mines.—The high position that Butte City, Montana, now occupies as a producer of the valuable metals, standing second only to Lake Superior in its shipments of copper, and ranking among the first in its production of silver, has naturally attracted much attention among those interested in mines and metals. Several valuable articles have appeared in certain technical journals descriptive of some of the individual mines of this district; but I have yet to learn of the publication of any general descriptive paper, giving an idea of the geology of the camp, the peculiarities of its veins, and a trustworthy description of the methods employed for the treatment of its ores. The object of the present paper is to partially fill this gap: and if it is noticed that less attention is paid to the three or four great silver mines and mills that first gave Butte its celebrity than their importance would seem to warrant, it is because exactly this subject, to the exclusion of nearly all other interests, has received particular attention in the articles already mentioned, and because full accounts of the Alice, Lexington, and Moulton Mines and Mills are accessible to all.

The District.—That portion of the Butte camp which to the present time alone possesses especial interest to the miner may be mostly enclosed within the lines of a rectangle having a length of 2½ miles and a breadth of 1 mile, roughly speaking. This rectangle extends from Yankee Doodle Gulch on the east to a point somewhat below the Boston and Colorado Concentrator on the west, and from the northern extremity of Walkerville district on the north to the extension of Park-street on the south. Within these narrow limits are the three great silver mines already mentioned, the Anaconda, Parrot, Colusa, Bell, Liquidator, Gagnon, Saint Lawrence, Mountain View, Clear Grit, and dozens of other noted and productive mines, besides the whole system of silver-bearing manganese leads, and an almost indefinite number of veins already discovered, and more or less developed. Outside this small area, though there is no lack of prospects, some of which promise exceedingly well, I do not know of a single property which can yet (autumn of 1884) be classed among the paying mines.

Geological.—The geology of this rich metalliferous rectangle is at first glance exceedingly simple, consisting apparently solely of a coarse-grained and very hard granite, containing an undue proportion of quartz and mica, and less felspar than is usual. On closer inspection it will be noticed that while in the eastern or cupriferous portion of the area mentioned the granite is exceedingly coarse grained, and shows no sign of stratification, in the western, or argentiferous division, the mica predominates, and is arranged to a greater or less extent in parallel layers, approaching a mica schist. So far as my observations extend, the felspar is entirely othoclase, while both the brown and white varieties of mica (biotite and muscovite) occur, though in widely varying proportions at different points. There is a regular and well-marked connection between the structure of the granite and

the contents of the fissures by which it is traversed, but neither the scope of this paper nor the observations at my disposal warrant any further speculation in this direction. The miners universally speak of porphyry dykes, which run parallel with, and usually form the walls of, all the large copper veins that have been opened to any great depth. But in every instance where I have been able to examine the matter personally the so-called "porphyry dyke" has been found to be merely an altered granite, in which the solutions flowing through the vein and saturating its walls to a considerable distance on either side have apparently decomposed the felspar and frequently the mica, leaving the fragments of quartz which once helped to form the granite surrounded by and embedded in the silicate of alumina which now represents the felspar, and altogether yielding a belt of rock parallel to the vein, and bearing a remarkable resemblance to porphyry. In other cases the results of decomposition have been such that the altered granite resembles a fire-clay containing angular fragments of quartz. This is often used where refractory material is required, and though not equal to a good fire-clay will still stand a very high temperature without melting. Of two bricks made from this decomposed granite, one (the smaller) was placed in a white-hot muffle for several hours, while the larger one was used as a support under the end of the same muffle for several weeks —a severe test even for a good firebrick—and both were removed practically unaltered. But on the bridge wall of a reverberatory smelting-furnace a few hours sufficed to melt it into a pasty mass, while a Golden City firebrick showed only a slight rounding of the thinnest edges. I have given these details hoping that they may undeceive certain inhabitants of Butte who are holding these leads of decomposed granite under the mistaken impression that they possess a great future value.

Classification of the Veins.—As even an imperfect attempt at classification is preferable to complete chaos, the Butte veins may be divided, for convenience of description, into two great classes:—

1.—Copper veins, carrying more or less silver.

2.—Silver veins, carrying little or no copper, and having a manganese gangue.

One or two of the most noted Butte mines, the Gagnon and its extensions, cannot be classed under either of these divisions, and must be described separately. The first group embraces the Anaconda, Parrot, Liquidator, Bell, &c. The second group includes the Alice, Lexington, Moulton, and many others of less note, but exhibiting the same surface characteristics. While both the valuable minerals and gangue of these two systems of veins are quite different, and while each group is geographically tolerably distinct from the other, they still possess many features in common. For instance, they all traverse a granite formation; they are nearly all accompanied by the zones of decomposed country rock described above, they nearly all pitch either perpendicularly or at a very steep angle. Though they are doubtless true fissure veins, they lack entirely, so far as my observation extends, that distinct demarkation between vein and country which is in some districts so very striking; nor do any of them possess the clay gouge on either foot or hanging wall, which is sometimes of such an assistance to the miner when drifting on the course of the vein. They all, without exception, contain copper and silver, though in widely varying proportions, and most of them contain traces of gold.

The Copper Veins.—These usually appear on the surface as wide bands of quartzose rock, much decomposed and heavily stained with oxides of iron. Carbonates and oxides of copper mostly appear only as stains, so that, as will be seen, there is little indication of the immense value below. This surface ore invariably carries silver, generally in a free milling condition, and in most of the larger veins in sufficient quantities to pay for treatment. In fact, nearly all the mines that are now considered distinctly as copper leads, such as the Anaconda, Parrot, &c., were first treated exclusively as silver properties—assaying from 10 to 60 ozs. per ton, and averaging perhaps 20 ozs. This surface ore continues until the water line is reached, at a depth of from 50 to 150 ft., when without warning it changes at once into the base ores that now constitute the principal value of these leads. These ores are somewhat indefinite minerals, resembling copper glance, erubescite, peacock copper, and some irregular compounds of copper, iron, and sulphur. Neither the Butte copper glance nor erubescite agrees exactly, either in its physical or chemical characteristics, with the mineralogical description of these compounds, and a careful study of them would amply repay any skilled mineralogist. A small quantity of copper pyrites is also found, but though most of the copper ores are slightly arsenical, I have as yet seen nothing resembling fahlerz (grey copper ore). I agree with Mr. William Semmons in considering enargite to be the principal source of arsenic. The condition in which the silver occurs in the free-milling ore is yet undetermined. The miners speak confidently of large amounts of chlorides, bromides, carbonates, and even oxides of silver, and it is certainly the prevailing impression that most of the precious metal occurs in these rare compounds; but aside from small quantities of chloride of silver, I have been unable, either by chemical or physical examination, to detect any of the salts of silver referred to, nor have I found any local chemist who has been more successful. Below the water line the silver is principally contained in the erubescite and copper glance, very small assays being obtained from either pyrite or chalcopyrite. But I am also inclined to think that it occurs largely as a thin coating of sulphide on the cleavage planes of the peacock ore; as frequently, on breaking open such ore masses, the whole plane is found plated with a thin coating of native silver, which has evidently resulted from the reduction of argentic sulphide. Perhaps the next most noticeable feature of the Butte copper veins is their great size and remarkable continuity. It is not at all uncommon to find the vein 30 ft. in width for several hundred feet of its course, and filled with ore from wall to wall for its entire distance. I am now referring to second-class ore, suitable for concentrating, and assaying from 15 to 18 per cent. of copper. This grade of ore forms the principal value of the camp, occurring with such regularity and in such large bodies that mining is robbed of most of its risks. The first-class ore is distributed with little regard for regularity, in chutes, chimneys, pockets, kidneys, and every other conceivable form, and on an average may constitute one-tenth of the entire ore. Where the various mines differ so greatly in both strength and quality, it is difficult to give average figures with any approach to accuracy, but I think I am well within bounds in placing the average width of pay ore in the principal copper veins at 7 ft. The Anaconda is the widest of any yet opened, averaging certainly over 12 ft. of profitable ore, and in many places widening to 30 and 40 ft. for a great distance. In order to show the unusual depth which this erubescite ore attains in this district, before being replaced by the poorer yellow sulphides which doubtless form the normal unaltered ore of these veins, I will mention here that the 800 ft. level of the Anaconda shows no diminution in the richness of the ore. (If I remember rightly, the deepest point in Chili at which these peacock ores have held was in the celebrated Piqué Mine at a depth of about 500 ft., at which point the rich erubescite ores were replaced by yellow sulphides, averaging about 7 per cent. It seems probable that Butte may count on a still greater depth of rich ores.) The Parrot and Liquidator also carry exceedingly strong ore bodies, and of remarkable continuity.

For convenience of more minute description the copper veins may be classed in two subdivisions:—

1.—Those in which the copper is found mainly in the shape of copper glance, or a mineral greatly resembling copper glance, though not containing quite the amount of copper called for by the formula CuS.

2.—Those veins in which erubescite is the principal copper-bearing mineral.

The Anaconda and Liquidator are good examples of the first division, having, as a rule, a gangue rock of quartz and decomposed felspar, and carrying scarcely any other ore except copper glance and a small percentage of pyrite, thus yielding concentrates of a very high grade; while the first-class ore, which is now sacked and shipped to Europe, consists entirely of high grade, forming, both as regards quality and quantity, perhaps the finest shipping product in the country. The Liquidator and Colusa also furnish a very large amount of second-class ore, which is sufficiently free from pyrite to concentrate to 30 per cent., and over, though in the lower levels, as might be expected, the proportion of pyrite has decidedly increased. The second division is represented in its most perfect type by the great Parrot vein and its eastern extension, and for some 2000 ft. carries an almost uninterrupted ore chute so far as explored. It is characterised by its high percentage of erubescite, carrying nearly its entire copper contents in the shape of that mineral, the occurrence of copper pyrites being rare and unimportant. The first-class ore can be easily selected to 30 per cent., while nearly the entire vein, from 5 to 30 ft. in width, is suitable for concentration, sampling 12 per cent. as the average of three years' working. But it is not alone as a copper vein that the value of the Parrot must be estimated; it is also a silver-bearing lead of great value, carrying on an average ¾ oz. of silver to each per cent. of copper, while above the water line, to a depth of 80 ft. or more, there is a fine body of free milling silver ore of great strength and value left untouched. The value of nearly all these veins is considerably enhanced by the fact that to a depth of 800 ft. no serious amount of water has been encountered, and that where proper appliances have been introduced natural ventilation suffices to keep the air in a perfectly good condition. The country rock is also of such a quality that no difficulties are encountered in timbering, beyond such as naturally arise in working out an ore body of 30 to 40 ft. in width, and which supplies no barren material for filling.

The Silver Veins.—The second great division of veins includes the manganese silver group, and presents certain unique features. In speaking of the formation and mineralogical characteristics of these leads, I am fortified by the opinion of Professor Alvin Weisbach, Professor of Mineralogy at the Freiberg School of Mines, who examined some of the mines and ores of this district with me. These manganese veins all lie in a small and strictly circumscribed territory, to the west and north of the copper group, and most of the crop boldly to the surface, forming often large comb-like ridges of brown and black rock stained principally by the oxides of iron and manganese, and showing every evidence of thorough decomposition. On closer examination, these croppings are found to consist of a more or less prominent quartz skeleton, heavily charged with the minerals of manganese known as pyrolusite, psilomelane, braunite, and wad. They occur in the order mentioned as regards frequency of appearance, the latter being comparatively rare. They are almost exclusively in a massive or amorphous condition; crystals, or even evidences of crystallisation, being almost unknown. But as interesting as the occurrence of these extensive masses of oxide of manganese in a district otherwise filled with sulphides may be to the geologist, they are still more interesting to the miner, from the fact that they are, without exception, argentiferous, though varying from 3 or 4 to several hundred ounces per ton. The average value of the selected ore extracted from these leads may be about 20 ozs., but in what chemical condition the silver occurs I am unable to say positively, though I can say with certainty that it does not occur either as a bromide or iodide, as seems to be the popular opinion, nor in my own investigations have I been able to satisfy myself of the occurrence of chloride, except in traces. The percentage of manganese varies as greatly as does the silver value, and unfortunately stands in an inverse ratio to it; the massive ores of manganese seldom containing more than a few ounces of silver, while the ores rich in silver have, as a rule, a gangue of quartz rather than of manganese. This is a serious drawback in smelting, for as quartz predominates in nearly all the Butte ores, an addition of manganese would be a most welcome flux. A few analyses of these ores will illustrate the above statements. A sample of surface ore from the Nile Mine, which represents fairly the better class of manganese ores, was found to contain:—

Analysis of Manganese-Silver Ore.—No. 1.

Oxide of manganese	Per cent.	47·60
Oxide of iron		12·40
Silica		34·20
Alumina		3·70
Silver (32 ozs.)		·11
Sulphur		Trace.
Moisture and loss		1·99
		100·00

A massive piece of manganese ore (a mixture of braunite and psilomelane) from an unknown mine contained:—

Analysis of Manganese-Silver Ore.—No. 2.

Oxides of manganese	Per cent.	88·40
Oxides of iron		3·20
Silica		6·60
Silver (9 ozs.)		·03
Moisture and loss		1·77
		100·00

A mill sample of a 20-ton lot of ore from a noted manganese mine near Butte, stoped at a depth of about 40 ft. from the surface, contained:—

Analysis of Manganese-Silver Ore.—No. 3.

Oxides of manganese	Per cent.	21·000
Oxides of iron		7·700
Silica		66·400
Alumina		2·400
Silver (80 ozs.)		·275
Moisture and loss		2·225
		100·000

These analyses have been selected as types of the principal varieties of manganese ores, and show plainly the decrease of manganese as the silver contents increase. In describing the first division, or copper leads, of this district I have shown how suddenly the vein contents change at the water line, from an almost free-milling silver ore without any copper, to a massive sulphurreted base metal ore, rich in copper and generally poor in silver. The transition is at least equally striking in the second or manganese-silver division. Here again the water line constitutes the boundary, and the decomposed masses of brown, yellow, and black oxides of iron and manganese change almost instantaneously into a gangue of silicate and carbonate of manganese (the former greatly predominating), with a large admixture of quartz, the whole being specked and threaded with minute granules and veinlets of zinc blende, pyrite, chalcopyrite, and galena—the two latter materials occurring in very subordinate quantities, and the entire amount of sulphurreted minerals seldom exceeding 5 per cent. of the ore, and much more frequently falling below 3 per cent., though in the Lexington and Alice Mines bodies of very base ore are encountered. The silicate and carbonate of manganese have their characteristic pink colour, and contrast very beautifully with the white quartz, but although the ore usually retains its full silver value, as compared with the upper decomposed portion of the vein, it has lost its worth as a flux in smelting, and, as a rule, is only fit for milling. I am at a loss to say in what condition the silver occurs in this ore. Owing to the high assays that I have often obtained from specimens which showed only the most minute specks of sulphide minerals, I have been led to search most carefully for some of the noble silver minerals, such as silver glance, brittle silver, &c., but entirely without success; nor could the experienced eye of Prof. Weisbach detect any trace of them in the various specimens submitted to him. Chemical tests also disprove the existence of silver chloride, so that as yet I am unable to explain the matter. The popular opinion is that the silver is contained in the zinc-blende and pyrite, but when the entire weight of those minerals forms less than 2 per cent. of a given sample that assays 1·5 per cent. in silver, it is difficult to reconcile that theory with the facts of the case. This is a very interesting and important subject for future research. Although not generally so considered, the great mines that have given Butte its celebrity as a silver district—the Lexington, Alice, Moulton, &c., belong strictly to this manganese-silver group, though their water line being comparatively near the surface, the oxidised zone continues but to a slight depth. They will show plenty of pink manganese as the carbonate and silicate of manganese are indefinitely termed by the miners, but, on the whole, quartz predominates decidedly, and zincblende and pyrite occur in much larger proportion than in most other mines of this group. I need hardly say that this necessitates a thorough chloridising roasting prior to amalgamation, and, in fact, none of the manganese ores that occur below the water line can be treated raw with any satisfactory results.

At present, with the exception of the great mines already mentioned, the manganese-silver belt is adding but little to the production of Butte. A few hundred tons per month of heavy manganese ore, assaying from 15 to 50 ozs. of silver, are mined and sold to the Boston and Colorado Smelting Works, and a much smaller quantity of more quartzose ores are treated in custom mills. Few, if any, of these mines—always with the exceptions above mentioned—are worked below the water line, and they are mostly too quartzose and too poor in silver to pay for smelting, nor can many of them stand the losses and heavy milling charges incidental to amalgamation. In time, with cheaper fuel and timber, I think a small proportion of them may prove of some value, but not before they come into the hands of companies willing and able to erect mills on a very large scale, and look to small profits per ton on large amounts of ore for their reward. At present most of them are in the hands of poor men who can do nothing with them themselves, but who hold them at prices that are virtually prohibitory to capitalists.

The Gagnon.—In my attempted classification of the Butte mines I have encountered one difficulty in the shape of the Gagnon Mine, which is so different from either class described as to be positively unique, and it demands at least a few words to itself. As regards geographical position it is assumed, and I think correctly, to be the western extension of the great Parrot lode, and apparently while trying to hold its own as a copper lode it has (together with its extensions, the Original and the Butte Original) been so powerfully influenced by the conditions which governed the formation and filling of the silver group into which it extends that it has assumed a mixed character, intermediate between the two divisions, and yet possessing certain characteristics of its own. While its percentage of copper is much lower than that of any of the true copper veins, its contents in silver are for the most part higher than any but the very richest of the silver group. Its gangue is principally quartz, and its chief ore an argentiferous zinc-blende, though the compounds of copper which occur in the Gagnon also carry a considerable quantity of silver, as does the iron pyrites, which occurs abundantly. The ore occurs in very large and strong pay chutes, and so far as exploration has yet gone certainly does not improve in depth. The best ore, both in quantity and quality, was found near the surface, several hundred feet above the present workings, but I am credibly informed that it is now rapidly improving in the deeper levels, and that every indication is present of other large bodies of rich ore in near proximity.

The Butte Minerals.—A list of minerals from this mining district, determined by myself, is appended. Those marked with exclamation points (!) are rare in this place.

Graphite !, native gold, native silver, argentite, cerargyrite, chalcocite, chalcopyrite, erubescite, cuprite, malachite, azurite, chrysocolla, galenite, anglesite, cerussite, sphalerite, rutile, molybdenite, pyrite, pyrrhotite, enargite, tetrahedrite, arsenopyrite !, pyromorphite !, hematite, magnetite, limonite, siderite, pyrolusite, psilomelane, braunite, wad, manganite, rhodonite, rhodochrosite, calcite, barite, witherite !, quartz, jasper, pyroxene, tremolite, actinolite !, hornblende, garnet, epidote, biotite, muscovite, andalusite, orthoclase, oligoclase, cyanite.

Standard Bank of South Africa.—The ordinary general meeting of this company was held, on Tuesday, at the City Terminus Hotel, Sir Henry Barkly, K.C.B., in the chair. In moving the adoption of the report, the Chairman said he hoped that it would have been his duty to congratulate them upon the disappearance of the commercial depression which, like a black cloud, had hung over the South African colonies during the last two years. That anticipation had not been realised, and even the cautious and moderate expectation of improvement they formed last year had only been fulfilled to a partial extent. The main reason of this was the continued drought, by which the previously existing distress had been aggravated, and the very low prices quoted for colonial produce in the markets of the world. There had been a falling off in wool, in ostrich feathers, diamonds, copper and in fact in every article of produce upon which the colonies relied for their prosperity, to the extent of quite 20 per cent. Under these circumstances the figures placed before them in the balance-sheet could not at all compare with those of the previous half-year. But they had every reason to be thankful that matters were no worse, and that by rigid economy the directors had so diminished the expenses of management as to enable them to pay the same dividend as last half-year. The board was not disposed to take a despondent view of banking prospects in South Africa Mr. R. Murry Smith seconded the motion, which was adopted.

"Salaambo."—"Salaambo," the masterpiece of Flaubert, the founder of the naturalistic school of literature, followed and debased by Zola and others, has at length been Englished by M. French Sheldon, and is now in the press. This fascinating story of love and war, rich in heroic Carthaginian lore, set in glowing barbaric splendour, surrounded with an atmosphere of dreamy tropical warmth and local colour, and with its weird serpent scene and mysterious cults, has long been regarded as an untranslatable work. It is said that this delicate task has been accomplished in such a subtle manner as to preserve all the vigour, natural realism, and idyllic style of the original. Flaubert's works have inspired more pictures in the French Salon during the past few years than any book except the Bible. The appearance of "Salaambo" in English is looked forward to with great interest in the literary and art circles of the Continent. The introduction has been written by Edward King, the American poet, and the volume is dedicated to Henry M. Stanley, the famous explorer. The work will be published by Saxon and Co., London and New York.

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FREDERICK MARSHALL, Registrar.
Dated Registrar's Office, Truro, 14th October, 1885.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

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FREDERICK MARSHALL, Registrar.
Dated Registrar's Office, Truro, 14th October, 1885.

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By order, R. J. FENNESSY, Secretary.
Offices of the company, 2, Copthall-buildings, E.C., 15th October, 1885.

THE SCOTTISH AUSTRALIAN MINING COMPANY (LIMITED).
Notice is hereby given, that the HALF-YEARLY GENERAL MEETING of the shareholders of the Scottish Australian Mining Company (Limited,) will be HELD at the City Terminus Hotel, Cannon-street, London, on FRIDAY, the 23rd October instant, at Twelve o'clock at noon precisely, to receive the directors' report and accounts, declare a dividend, and transact the other usual business, and also to consider and pass a resolution to grant to Charles Garston Grainger, Esq, late secretary of the company, in consideration for his past services, a pension of £250 per annum, to be payable out of the profits available for dividend on the capital of the company.
The Share Transfer Books will be closed from Thursday the 15th instant until Friday the 23rd instant, both days inclusive.
By order of the Directors,
F. W. TURNER, Secretary.
50, Old Broad-street, London, 13th October, 1885.

NOTICE.
UNITED MEXICAN MINING COMPANY (LIMITED).
Notice is hereby given, that the ORDINARY HALF-YEARLY GENERAL MEETING of the Proprietors of this Company will be HELD at the Guildhall Coffee House, Gresham Street, London, E.C., on Wednesday, November 4th, 1885, at One o'clock precisely.
Holders of Share Warrants to Bearer desirous of attending the Meeting must deposit their warrants at the Company's office three days before the meeting.
The Transfer Books will be closed on the afternoon of October 24th, and opened on the day after the meeting.
By Order, DAVID GREENE.
3, Great Winchester-street, E.C., October 15th, 1885.

MINING ENGINEER.—An old established Company DESIRES to ENGAGE a competent MINING ENGINEER to proceed to Mexico, and undertake the technical management of important silver mines, at a liberal salary. Must be a man of unimpeachable character and considerable experience, and should be, at any rate, theoretically acquainted with silver mining.
Perference will be given to a man with a practical knowledge of silver mining, and to one acquainted with Spanish.
Address "Unit," care of Leathwait and Simmons, 1, Pope's Head-alley, Cornhill, E.C.
October 10, 1885.

SILENCIO GOLD MINES (LIMITED).—Six rich lodes, varying from 18 in. to 6 ft. in width, yielding an average of 2 ozs. of gold to the ton; one lode giving, by assay, 4 to 5¼ ozs. of gold per ton. An assay made by Messrs. Johnson and Sons, Assayers to the Bank of England, on general average lode stuff, showing no visible gold, gives 6 ozs. 12 dwts. 12 grs. to the ton. 10,000 shares already applied for.
Full prospectus and reports forwarded on application to the Secretary, 32, St. Swithin's-lane, London, E.C.

FOR SALE, price £5, three single and three double volumes of the *Mining Journal* from the year 1857 to 1865. Half bound, in excellent condition. The above volumes can be had separately at 15s. single, and 25s. the double volume.
Apply "G." MINING JOURNAL office, 26, Fleet-street, London, E.C.

IMPORTANT TO MINE OWNERS.
ROCK DRILLS and AIR COMPRESSORS.—Several on hand at low prices.
WARSOP AND HILL, ENGINEERS, NOTTINGHAM.

AGENTS WANTED TO PUSH FIRST-CLASS MACHINERY OILS commanding a large and successful sale. Liberal commission.
Address, "Box 22," Post Office, Liverpool.

WANTED, a SET of good SECOND-HAND ORE DRESSING MACHINERY for Dressing Lead and Blende Ores,
Applications, giving full particulars of the Machinery, where it may be seen, and lowest cash price, to be sent to "A. B.," MINING JOURNAL Office, 26, Fleet-street, E.C.

WANTED, to proceed to Australia, a thoroughly competent and experienced SMELTER, to take charge of the Smelting and Refinery Works of a Silver Mine. Must be a specialist in the work of the Pilz and other similar furnaces, and capable of working and constructing the same. A liberal salary will be paid.
Apply by letter, giving full particulars of present employment, with references, to "N. S. W.," care of Messrs. W. Dawson and Sons, 121, Cannon-street, London.

WINDING DRUM (to work an incline about 460 yards long) not less than 10 feet diameter; also good second-hand STEEL WIRE ROPE.
Apply to JOHN PARSON SMITH, Shrewsbury.

WANTED, PAIR 42 in. or 44 in. WINDING or MILL ENGINES.
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JOHN VAN VOORST, 1, Paternoster-row.

COAL MINES REGULATION ACT, 1872.
EXAMINATION FOR MANAGERS' CERTIFICATES OF COMPETENCY.
DISTRICT UNDER THE CHARGE OF WILLIAM ALEXANDER, ESQ., H.M. INSPECTOR OF MINES.

NOTICE IS HEREBY GIVEN, that an EXAMINATION for MANAGERS' CERTIFICATES OF COMPETENCY, under the above-named Act, will be HELD on the 27th and 28th days of November, 1885, and CANDIDATES INTENDING TO PRESENT THEMSELVES AT SUCH EXAMINATION must, on or before the 11th day of November, notify such intention to the Secretary of the Board of the above-mentioned District, from whom all information as to particulars can be obtained.
By order of the Board,
135, St. Vincent-street, Glasgow. STUART FOWLIS, Secretary.
N.B.—Persons who do not reside within the District are equally eligible for examination with those who do.

V. R.

SALE BY ORDER OF THE SECRETARY OF STATE FOR WAR.
MESSRS. HORNE, SON and EVERSFIELD, 17, Great George Street, S.W., WILL SELL, BY PUBLIC AUCTION, at the Royal Arsenal, Woolwich, on Thursday, 22nd October, 1885, at Eleven o'clock in the forenoon precisely, the following SURPLUS and UNSERVICEABLE STORES:—

10 tons of PIG LEAD.
20,000 PAIRS of NEW HORSE SHOES.
OLD ZINC, LEAD and FOUNDERS' ASHES.
OLD BLANKETS and RUGS.
OAKUM, BELTS.
PAPER CUTTINGS, 4 tons of TOW.
CANVAS, HARNESS, CARTS.
STAVES, TIMBER, FIREWOOD.
OLD COPPER, OLD FILES, &c.
300 tons of OLD CAST and WROUGHT IRON SCRAP.
OLD STEEL, SERGE CUTTINGS.
POUCHES.
OLD BUFF and BLACK ACCOUTREMENTS.
GUNNY BAGGING, HAIR (HORSE.)
JUNK, WHEELS, LEATHER.
BARRELS, MAHOGANY, CASES, (WOOD, &c.)

The lots may be viewed from Ten to One o'clock and from two to Five o'clock on the Monday, Tuesday, and Wednesday, previous to and on the morning of the day of sale; and Catalogues may be obtained at the War Office, Pall Mall; at the Ordnance Office, Tower; and the Ordnance Office, Royal Arsenal, Woolwich.

A GLAMORGANSHIRE COLLIERY FOR SALE.
TO BE SOLD, BY PRIVATE CONTRACT, as a going concern a COLLIERY in Glamorganshire, situated about midway between the shipping ports of Cardiff and Swansea, adjoining to and having commodious sidings in connection with the Great Western Railway system.
The mineral area is upwards of 500 acres, and is held from two landlords upon very favourable conditions, the Royalties being exceptionally low. The unexpired term of the leases is about 40 years.
There are two pits sunk on the property, both of which are fitted up with, winding machinery, but only one is used at present for raising coal.
The colliery is ventilated by a Waddle fan. On the surface is erected an excellent pair of horizontal air compressing engines, by John Fowler and Co., of Leeds, for driving the hauling engines underground.
There is also a large number of coke ovens, coal washing apparatus, &c., in connection with the colliery.
The quantity of coal now worked is about 1300 tons per week, but this could easily be considerably increased.
The plant is of modern description, and capable of dealing with a much larger output.
For further particulars apply to Messrs. BASSETT, BASSETT, and LEE, Civil and Mining Engineers, Church-street, Cardiff.

CORNWALL.
FOR SALE BY TENDER, in one Lot, by order of the Liquidators of the Kit Hill Great Consols Company (Limited), the MINES known as the
KIT HILL GREAT CONSOLS,
Stoke Climsland, Cornwall, 2 miles from Callington, with engine house, account house, and all outbuildings held under lease dated 15th February, 1851, by H.R.H. the Prince of Wales, for 21 years from 7th January, 1851, minimum rent £30 per annum, dues one-twentieth.
The property is in a well-known mining district. The engine-shaft has been sunk 112 fms., and a tunnel 8 ft. by 8 ft. has been driven 350 fms. to intersect the various lodes running through the sett.
The machinery and plant of the best description, and well adapted for the development of the mines, comprise one 30 in. cylinder rotary engine with two Cornish boilers, 10 and 8 tons respectively; one horizontal engine, 16 in.; one 13½ in. air compressor; 200 fms. 2½ in. wrought-iron air-drawing machine; about 200 fms. 2¼ in. steel wire rope, with pulleys and stands; two eight-arm capstans, and about 200 fms. 10 in. rope; two shaft teakles, with shear-legs, &c.; three "Eclipse" rock-drills; three Cornish drills; two 16 in. cylinder Robey engines; two 13 in. air-compressing engines; about 400 fms. 3 in. wrought iron pipes. About 400 fathoms tramways, tram carriages, &c.
The Liquidators do not bind themselves to accept any tender. All tenders to be sent in by the 1st November, 1885, addressed to the Liquidators, care of Messrs. SNELL, SON, and GREENIP, Solicitors, 1 and 2, George-street, Mansion House, London, E.C., from whom full particulars can be obtained.

ST. JUST, CORNWALL.
MINING SETTS, MACHINERY, AND PLANT FOR SALE.
MR. A. BERRYMAN will OFFER FOR SALE BY AUCTION, at the Central Hall, Penzance, on MONDAY, October 19th instant, at Three o'clock in the afternoon, as a going concern, and in One Lot, the MINING SETTS of
EAST BOTALLACK MINE,
Situate in the parish of St. Just (in Penwith), Cornwall, together with all the MACHINERY, MATERIALS, and PLANT thereon.
The setts extend over a large area of mineral ground, and the terms are easy.
Further information may be obtained of Captain JOHN HOLLOW, on the Mine; or of the Auctioneer, Penzance.
Dated 5th October, 1885.

PIT SINKING, WINDING COAL, PUMPING, &c.
PORTABLE STEAM ENGINE FOR SALE, 25-horse power, with or without link motion reversing gear; a 14-horse power Ditto, also gear to wind and pump.
A 9 H. P. VERTICAL STEAM ENGINE, with link motion reversing gear (winding drum if required).
A 6 ft. pan MORTAR MILL, VERTICAL ENGINE, and BOILER combined, on carriage and travelling wheels.
Apply to—
BARROWS AND STEWART, ENGINEERS, BANBURY.

TO CONSUMERS OF DYNAMITE.
PARTIES INTERESTED in this EXPLOSIVE desirous of forming a Company in (say) 2000 shares of £5 each, to MANUFACTURE and DEAL IN DYNAMITE, may communicate with the undersigned.
It will be remembered that Nobel's Company on a Capital of £14,000 have realised upwards of £300,000.
EDWARD ASHMEAD.
2, Drapers' Gardens, London, E.C., 14th October, 1885.

FOR SALE.
IN the very best mining district in Sweden can now be had an EXCELLENT IRON ORE WORKS. It can be either SOLD or TRADED AWAY for something else. Most excellent and rich hunting and fishing. Answers immediate, as the owner is now in London.
Address, "Miner," care of Willing's Advertising Offices, 125, Strand, W.C.

FOR SALE.—ONE PAIR 32 in. by 5 ft. Stroke HORIZONTAL WINDING ENGINES, with drum to suit buyer.
ONE PAIR 30 in. by 4 ft. Stroke HORIZONTAL EXPANSIVE ENGINES, with or without 40 ft. Wadell Fan.
ONE 24 in. by 6 ft Stroke HAULING or DRIVING ENGINE.
For price and full particulars, address JAMES LIGHT, Tunnel Terrace, Coseley, near Bilston.

YORK AND LANCASTER UNITED MINES COMPANY (LIMITED).
IN LIQUIDATION.
Rimington, near Clitheroe.
The Mines of this Company, producing lead ores, barytes, and calamine up to the date of Liquidation, together with all the WORKING PLANT, MACHINERY, and BUILDINGS, TO BE DISPOSED OF BY PRIVATE TREATY.
For terms and other particulars, apply to the Liquidator, Mr. W. WHITAKER, Chartered Accountant, 1, Chancery-lane, Manchester; or to Messrs. COOPER and SONS, Solicitors, 86, King-street, Manchester.

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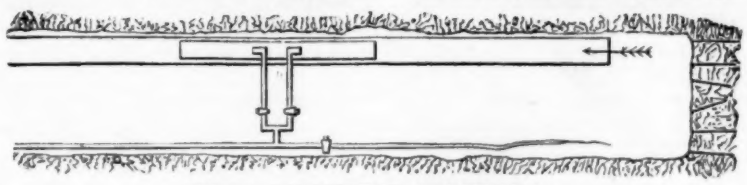

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Will clear all Tunnels and Ends from noxious fumes in the shortest possible time, 10 minutes only being required to clear the largest blast; distance no object.

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Reference invited to Capt. JOSIAH THOMAS, Dolcoath Mine, Capt. BISHOP, East Pool Mine, and others.

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Brunton's Taped Guttapercha Safety Fuse is the Best Fuse for use with Dynamite in wet ground. Fits the Detonator without unlapping.

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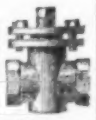

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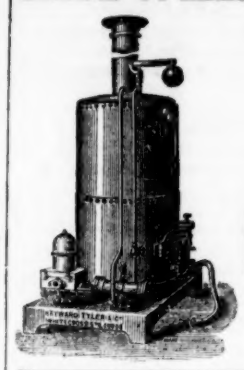

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Pick and Shovel distanced as regards time and cost by our Patent System of applying Explosives and Machinery to the Excavation of Earth, Clay, Sand, Gravel, Soft Rock, &c.

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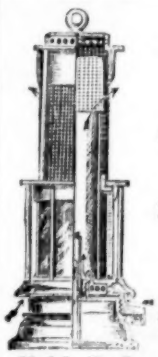

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We have over 1000 stamps in successful work in the various Western Gold Districts of the U.S. in Central and South America, Mexico, and Hungary.

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Silver amalgamation in Pans is essentially an American system evolved after years of work on the rich silver mines of Nevada.

We have over 600 Stamps, with necessary pans, settlers, roasting furnaces, &c., all of our own manufacture, at work in different silver camps of the United States, Mexico, and South America, Phillipine Islands, Asia, Chile, and Central America.

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Of the most approved German pattern and arrangement, or with Stamps and Frue Vanner Concentrators for low grade silver ores, light in lead. We have over 20 large German pattern mills at work on lead, zinc, or copper ores, and numerous Vanner mills on ores never before successfully concentrated.

Notably among the large Concentrating Works built by us we mention ANACONDA WORKS, Montana daily capacity 750 tons of copper ore.

Mining Pumps, Cornish pattern, of the largest sizes. **Hoisting Engines,** from 4 h.p. up to the largest direct-acting engines to sink 3000 feet.

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We have 80 Water Jacket Smelting Furnaces in use from 30 in. circular up to 33 in. by 80 in. for copper, lead, and silver smelting. Special High Jacket Furnaces for copper ores.

Engines, plain slide valve, Corliss or compound Corliss Boilers. **Leaching Mills, Hallidie Wire Rope Tramways. White, Howell. Bruckner, and Stetefeldt Roasting Furnaces, &c.**

We have had twenty years experience in the manufacture solely of MINING MACHINERY, and have special facilities for shipping to all foreign parts through our New York Office, where all details of clearance, shipment, and insurance are conducted. Our machinery is already well known in Mexico, Peru, Chili, Venezuela, Honduras, and other South American countries.

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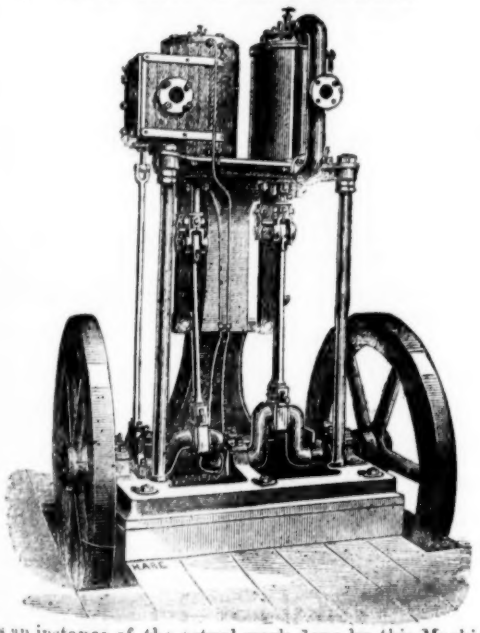
AND AIR COMPRESSOR.



As an instance of the actual work done by this Machinery in various kinds of ground, some of it the hardest rock, it may be mentioned that in Cornwall, irrespective of the work performed by the "Champion" Rock-borers and Air-compressors purchased by various Mines, the drivage, rising, sinking, and stoping done by contract by the Proprietor with his own Machinery now amounts to over 1600 fathoms.

Several of these Air-compressors, ranging from 3½ to 12 tons in weight may be seen in constant work in the Camborne Mining District.

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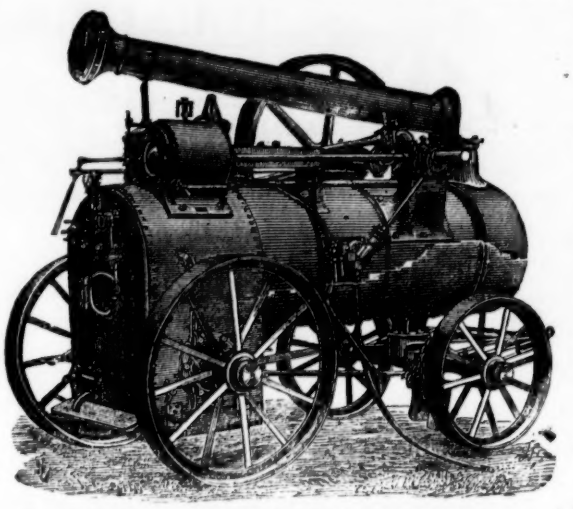

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OVER 22,500 SOLD.

Thrashing Machines.
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Straw, Corn, and Hay Elevators.

Chaff Cutters for Steam Power.

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GOLD MEDALS AND OTHER PRIZES have been awarded to CLAYTON AND SHUTTLEWORTH at all the important International and Colonial Exhibitions, including
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Its strength is unequalled. Its action is certain.

In action it gives off neither flame, smoke, nor offensive smell. By its use labour is economised, as work can be resumed immediately after the shot is fired.

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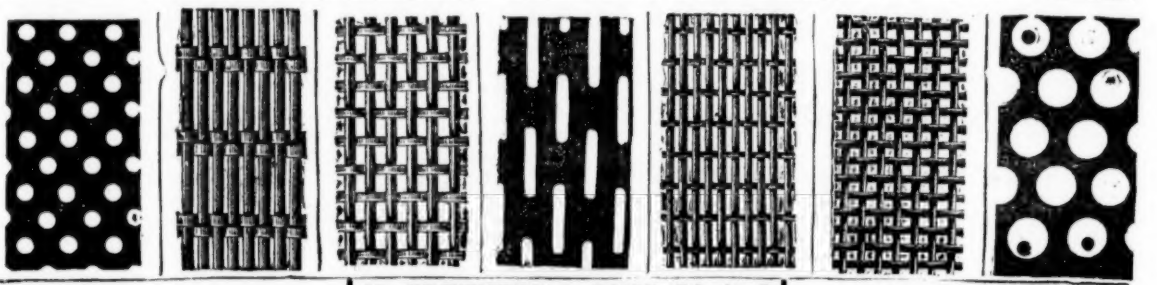

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Every information relative to the progress of lode-tin mining in the Wild River district (termed by geologists "The Cornwall of Australia") can be obtained by communicating with the undersigned. CHARLES JENKIN.

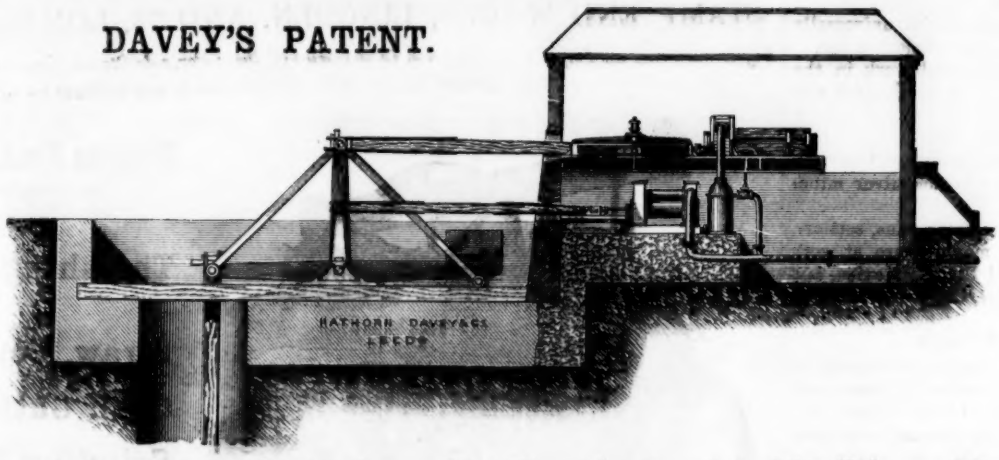
"Herberton Advertiser" Office Herberton, September, 1885.

HORIZONTAL CORNISH ENGINE.

COMPOUND PUMPING ENGINES.

IMPROVED PLUNGER LIFTS.

DAVEY'S PATENT.



This is an economical and cheap Engine for working Cornish pitwork in Metalliferous Mines.

The parts of the Engine are not heavy—it is, therefore, easily transported.

The distribution of steam in the Engine is precisely the same as that of an ordinary Vertical Cornish Engine, and it works with the same amount of economy. It takes steam only on the indoor stroke, when the spears are being lifted. During the outdoor stroke the weight of the spears lift the water, so that the action of the Engine and the arrangement of the Pumps are precisely similar to that of the ordinary Cornish Engine. This Engine, however, is only about one-half the weight of a Cornish Engine of the same power, whilst the buildings and foundations required are not more than half the cost.

This Engine is provided with the differential gear, enabling it to be handled by inexperienced men—it is, therefore, especially suitable for Foreign Mines.

PUMPING MACHINERY OF ALL KINDS.

CATALOGUES ON APPLICATION.

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A Jointing Material possessing many times the Tensile Strength of anything hitherto manufactured for the purpose.

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These three materials are manufactured under the Turner-Bell Patent, and the Rights will be Strictly Protected by Legal Proceedings against all Infringers.

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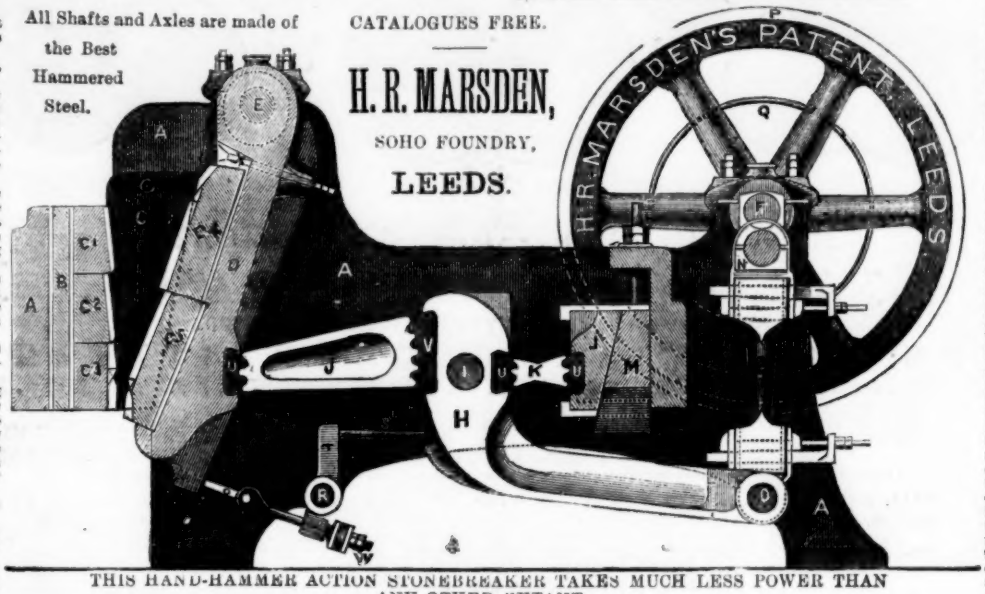

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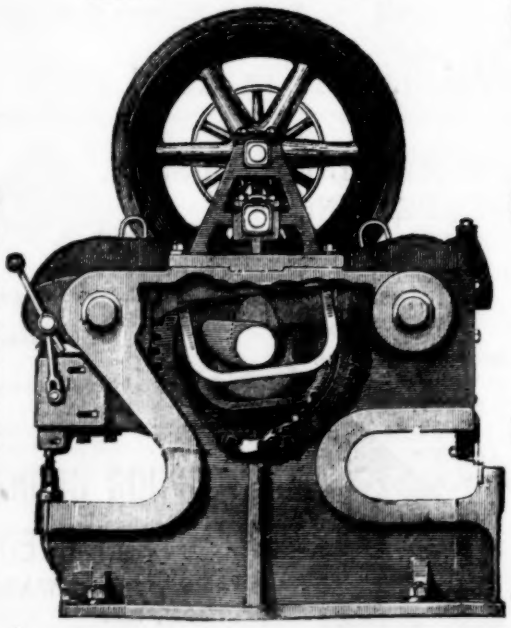

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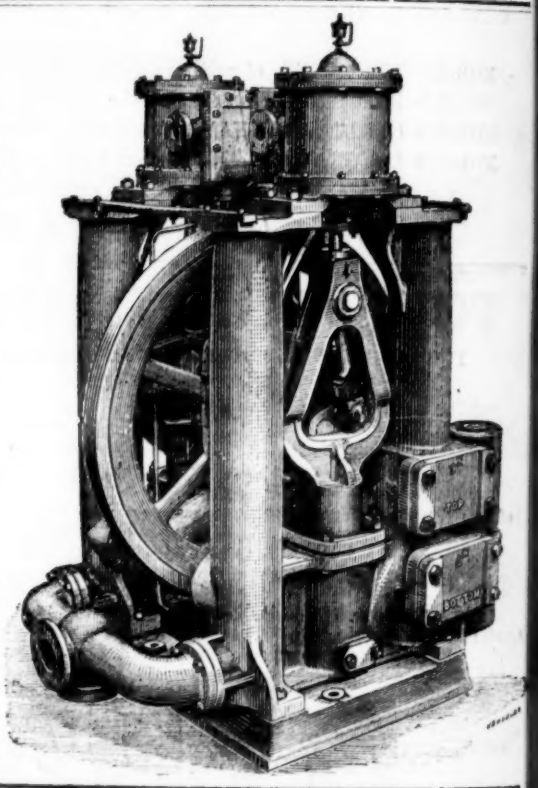

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